

PUBLIC FINANCING AND CHARGING PRACTICES OF SEAPORTS IN THE EU

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1 Introduction

1.1 Explanatory remark

The subject of financing and charging of terminal-related infrastructure and suprastructure in European Seaports has been proven as highly sensible since port authorities and port operators regard both categories as instruments of competition policies. Due to the increasing competition of seaports for vessel operators but also for the settlement of port related companies, the relevant authorities run a very restrictive information policy.

1.2 Structure of the report

The structure of the report is split in two parts. In the first part an introduction will be given - describing the scope but also the limitations of the study. Furthermore, it outlines some matters that refer to the issue of public financing and port competition but that are not within the scope of the study.

The detailed results for WP I and WP II are given in the second part. Here, the results for both workpackages WP I and WP II are presented per country.

1.3 Background information

The study 'Public financing and charging practices of seaports in the EU' was commissioned by DG TREN in order to gain information on one hand about financial flows from public purse into the port sector and on the other hand about financial flows back from the port sector to the state in terms of charges.

This introducing chapter deals with the description of the possibilities and limitations of this study. As described in the proposal to the tender, there some attempts have been made already to bring some light into the darkness of the practices being applied in the field of port financing and related issues. The aim of the study now being carried out is to extend the knowledge on several financial topics with respect to the relationships between the public and the port authority, between them and the port operating companies as well as the shipping, forwarders and shippers.

The rationale background for commissioning the study was that the development of the port sector within the European Union continues to depend on public sector intervention in terms of financial flows and charging practises. Existing inquiries and available information on financial flows from the state into the port have shown that the transparency regarding identification and measurement of the financial flows as well as tracking of these flows is insufficient.

Without going now into details with respect to the justification one or the other financial practice, e.g. for example for the sake of regional development, port related employments etc., the important task of this study is to contribute to a transparency of the financial flows between the public (state, parts thereof, cities or other public organisations) and the port authority, port handling companies or intermediates between them. There is no doubt that

the volumes of public investments reported to the EU in the inquiry from 1998 are understated compared to the magnitude of financial flows being reported in different sources such as in specific public reports, household plans, trade journals and press. Therefore, it should be assumed that a certain level of uncertainty or even unreliability exists concerning the role of public entities in financing their ports or parts of them. One other area of interest is the identification of different systems of costing and financing (at least three of them). As stated in our proposal to the tender, remarkable differences exist regarding charging practices, cost recovery methods reaching from statements such as “full cost recovery” to “cost recovery is envisaged by revenues”.

Therefore, the study will supplement the existing information base line on public flows into the port sector and charging systems by adopting a dual approach, i.e. by identifying and analysing direct (= conventional) sources of information, and simultaneously tapping indirect (= alternative) sources of information.

1.4 Scope of the study

Against this background, it is the aim of the study to contribute to the transparency on both areas public financial flows into the port sector and charging flows back to the state. Therefore, the task in the two workpackages is to focus on financing and charging systems and on a concrete snapshot of financial flows for 2003.

Workpackage I: Public financing of seaports

The first issue has been addressed in workpackage I which is split in two parts.

WP Ia - Identification of systems for public financing in 20 Member States

The first part deals with the *Identification of systems for public financing in 20 Member States*. Here, the individual applied systems of public financing for the 20 Member States in 2003 referring to the four categories

- terminal related infrastructure, comprising
 - quays / docks
 - jetties
 - stacking yards
 - land reclamation
- port superstructure, comprising
 - roads, rails on the terminal
 - terminal paving/surface finishing
 - port/office buildings
 - warehouses
 - cranes
 - mobile equipment

- operational management, comprising
 - only direct subsidies
- legal provisions to be made comprising
 - only direct subsidies (pension schemes etc.)

will be identified and described.¹

Additionally, the systems of public financing for the access infrastructure as another (fifth) category will be identified, comprising

- access channels (including disposal of dredging material)
- navigation aids
- turning basins
- breakwaters
- roads accessing the ports and in the ports but outside terminals
- rails accessing the port and in the ports but outside terminals
- inland waterways

Although the issue of the access infrastructure is not included in the scope of the study, the consortium feels the necessity to cover it in WP Ia to the extent possible. The access infrastructure is also an essential factor for the competitiveness of a port which is why the consortium decided to consider the public financing systems in addition to the scope of the study described in the tender in order to round off the whole picture on public financing systems.

WP Ib - Identification, description and quantification of public financing of the top 30 EU seaports for 2003

The second part aims at the *Identification, description and quantification of public financing of the top 30 EU seaports for 2003*. The ports to be addressed in this part were identified in a selection process that considered in addition to the total volumes per port also port characteristics in terms of size and strategic significance. As elucidated in the proposal, particularly container ports have increased their role in maritime transport significantly in the recent past. This development will also continue in the future due to the strong importance of container transport for the world economy. Therefore, a focus on container ports would risk neglecting certain regions, such as the Baltic Sea as a region with smaller container ports depending on container feeder services.

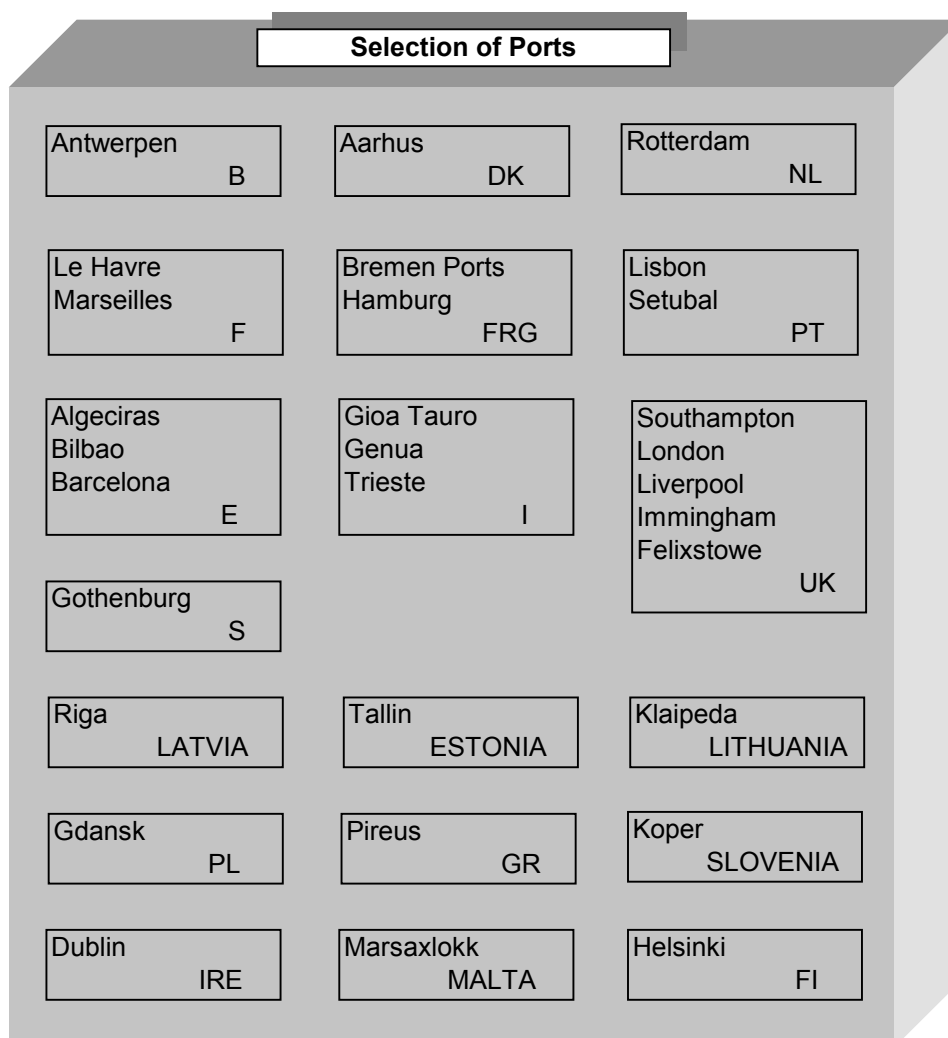
The approach to include in the list-of-30-port solely according to total traffic volumes would have excluded large container ports such as Felixstowe or Gioia Tauro as well as Setubal or Lisbon as large Portuguese ports.

¹ The specified relevant categories refer to the tender. In the tender also the constraint was given that information will be provided to the extent that data are available.

Moreover, both approaches would partly exclude ports from smaller countries, like Koper in Slovenia or the Baltic ports.

Therefore, the consortium proposed to take into account for the selection of the 30-ports-list different characteristics, i.e. total handling volumes, container handling volumes and geographical distribution – leading to the following list of top 30 EU ports as a economical and political balanced mix:²

Fig. 1-1: Selection of top 30 EU ports



² This list-of-30-ports was suggested in the proposal of the consortium and accepted by the Commission.

Based on the output from WP Ia, the systems of public funding will be assigned to the 30 EU ports. Furthermore, for each of the 30 seaports in the EU the public financing for the four categories for 2003 will be identified, described and quantified to the extent possible, i.e. for

- terminal related infrastructure, comprising
 - quays / docks
 - jetties
 - stacking yards
 - land reclamation
- port superstructure, comprising
 - roads, rails on the terminal
 - terminal paving/surface finishing
 - port/office buildings
 - warehouses
 - cranes
 - mobile equipment
- operational management, comprising
 - only direct subsidies
- legal provisions to be made comprising
 - only direct subsidies (pension schemes etc.)

Workpackage II: Charging practices of seaports

The second issue on charging flows has been addressed in workpackage II. Here, it is the aim to identify and describe the systems of charging practices in the 20 EU Member States. As described in the application, the relevant systems of charging practices refer to the port superstructure – in those Member States where it is publicly owned – and to the terminal related port infrastructure. Similar as workpackage I, also the second workpackage is divided in two tasks.

WP IIa - Charging practices related to port operators

The focus of WP IIa is to identify and describe the different systems within the 20 Member States that are applied for charging investments for superstructure and/or terminal related infrastructure.

More specifically, WP IIa refers to the charging of rent and leases for terminal related infra- and superstructure. These charges are borne by the supply side, i.e. by the port operators as the user of the superstructure and the terminal related infrastructure for offering their port services.

WP IIb - Charging practices related to ship operators

WP IIb concerns the charging of the demand side for port services, i.e. the second group to be charged consists of the vessel operators calling European ports.

However, it is necessary to differentiate between the payments that a vessel operator has to pay to a public authority and payments to be paid to the terminal operator for commercial activities. The latter are commercial revenues and refers not to the scope of the study. Hence, for WP 2b it is essential to identify the dues that have to be paid by vessel operators for public financed suprastructure and terminal-related infrastructures.

1.5 Limitations in the scope of the study

1.5.1 Sources of information

The findings of the investigations in the different countries confirmed what had been written in the proposal for the project, namely that information to solve the tasks must be based on direct and indirect sources. The direct sources comprise:

- national and regional laws, rules and regulations,
- reports on decisions and measures of parliaments,
- official EU documents,
- public reports on the national and subnational level,
- annual reports from port operators etc.

As to be expected, a challenging issue in this study was the identification and exploitation of the so-called indirect sources of information. These refer to:

- reports of port authorities,
- public and internal reports of political parties,
- statements on conferences etc. given by port representatives,
- declarations by port associations,
- publications and statements given by ESPO and FEPORT,
- reliable press releases and similar publications,
- reports and statements from regional development bodies,
- relevant studies on port development,
- PHD theses, diploma work etc.,
- contacts with companies and authorities,
- strictly confidential sources.

First evaluations of the findings achieved by the project partners revealed that even if they have good contacts it is very difficult to get the desired information. Nevertheless, the results indicated so far allow some hope to come to reliable conclusions. The findings have

confirmed our approach that only a combination of analysing written sources with interviews with representative persons from private and public organisations is the adequate way.

1.5.2 Problem of confidentiality

The consortium stressed already in the application the problem of confidentiality of information and indirect sources. The partners in the consortium have direct contacts with stakeholders in public and private port companies in the port sector. However, it has to be underlined also in the report that all information gathered from those sources can only be used officially (i.e. incl. indicating names of contact persons and function) if the contact persons agree to the official use.

In case that the contact persons do not confirm their consent to being revealed as a source of information, the consortium will not be able to reveal the source. If this is the case, the use of information from an indirect source or 'individual personal contacts' will be limited in the specific case to the available information without any official confirmation from the genuine source. In this case, it should be recognised that the information should only be viewed as tentative due to the missing genuine source.

1.5.3 Aspects from the port sector related to the scope of the study

In addition to the scope of the study, the consortium feels also the need to elucidate some further areas with respect to port competition and financing matters in ports. The analyses of these areas are not within the scope of the study but outlining these areas shall contribute to the understanding of the situation of financing systems in the European port sector.

The aspect of the access infrastructure has been mentioned already within WP Ia under point 1.4. However, not merely the access infrastructure but also the complete hinterland infrastructure is a crucial competition factor for ports. Nowadays, port services become more and more exchangeable due to similar services, similar technical equipments and therefore comparable performances. Against this background, efficient hinterland infrastructure networks for road, rail and inland waterways have become important competition factors in order to provide a smooth transport from a hinterland source to a port and from the port to the destination in the hinterland. Consequently, the issue of financing, charging and cost coverage seems to play an important role not only in the port sector – that is covered in this study - but in the whole European infrastructure sector. However, if motorways, railways networks and inland waterways from industrial areas in Europe are crucial for transport reasons to and from ports, it has to be acknowledged that these infrastructures have been built also for spatial planning reasons, for facilitating pure land freight transport, for tourism, for socio-economic reasons etc.. Hence, it is obvious that those infrastructures benefit the European port sector as well as other sectors in Europe. The remaining unsolved question refers therefore the limitation of port infrastructure outside the port area.

Another issue that should be mentioned here briefly is the aspect of incomes of the state from non-port related business. In some ports the incomes from the so-called non-port related business play an important role for a port authority and therefore for the cost coverage of public investments in ports. In the Port of Lisbon for example. The port authority generates money from renting out land areals to the tourism sector, e.g. restaurants. The reason for this development is that the generated income from tourism business like restaurants is higher than from traditional port activities. A similar development refers to the

settlement of industrial activities in port areas (e.g. the chemical industry cluster in the Port of Antwerp). Again here is the reason that a higher income can be generated from rents paid by industry than from port related activities.

Regarding the plan to make a snapshot on public financial flows for the year 2003 the following has to be annotated. Looking at the infrastructure investment cost especially against the background of the transparency guideline the problem occurs that on the one hand infrastructure investments usually occur with intervals of several years and then on the other hand often are split over a period of more than one year. The result is that, focussing on a single year, the amount for infrastructure investment identified for a port or a country is not representative especially for the comparison with other ports or countries as it is only a snapshot.

A more objective approach would be to look at the investments in the past and calculate the annual investment volume based on depreciations of all relevant infrastructures not yet fully depreciated. This would take into consideration not only the financial flows of a short period but also the value of all relevant investments distributed over the time of use. The problem for this approach is, that it requires a complete overview over all relevant past infrastructure investments and in addition a common depreciation scheme in order to calculate an annual value-equivalent of all infrastructures of a port. This task is almost impossible to solve.

However, as a second best solution this study tries to give an overview of the financial flows for port investment for 2003 and – where possible – also gives hints on previous or planned large-scale investments.

Furthermore, port financing are often allocated for complex projects involving interventions of different nature without specifying the specific allotment for each intervention and without reporting in the balance sheets the money spent for each intervention: in these cases it is therefore difficult (if not impossible) to split the financing granted per any specific and single work.

As far as the charging system is concerned, the problem of depreciation comes on the fore again. When a port infrastructure is completely charged to the State, and the accounts of the port management body reflect only the financial movements relating to each period, the annual depreciation rate of the infrastructure does not appear in port accounting. Hence, it becomes difficult to reach and control port cost recovery via charges. The background is the approach that public investments do not have to be recovered. Therefore the problem to reach a common philosophy of port management and financing at European level will continue to play a pivotal role.

An final aspect to be mentioned and that influences/reduces the justification for major public investments in terminal related infrastructure without full amortisation of all cost is the fact that many ports more and more do not serve not only a national hinterland but act as transit gateways or transshipment hubs for other countries. On the one hand this increases volumes and capacity needs. On the other hand this capacity is used by the terminal operators to make business with traffic for other countries. So the beneficiaries of the infrastructure especially for this increasing part of the port handling volume are at a first glance the terminal operator, the shipping line and the country served by using the port as transit point. Therefore, the advantage of the country investing in the terminal capacity is getting lower.

At a second glance, however, the infrastructure investments also have an economic impact in the port region, even if this is reduced in case of serving transshipment volumes for other countries belonging to a port hinterland. Especially in regions with structural economic problems port-infrastructure investments are an important instrument to foster economic activity and employment. This is true also for transshipment as at least handling activities and related income multipliers lead to additional employment in the port area. Therefore it is justifiable also from the public point of view to invest national tax income in terminal related port infrastructure, even if it is not primarily used for serving the importing and exporting economy of the national hinterland.

A problem occurs if different financing practices and cost recovery necessities are existent within the same relevant market. For a long time it was not considered problematic that port infrastructure at the North Continent was mainly publicly financed while UK ports had to take care for their infrastructure needs with own/private money. The reason was that the ports in the UK and in the North Continent served a different hinterland so that differences in cost and prices had no or merely limited impact on competition. This changes with increasing importance of transshipment for the port business. This business field at least to a higher degree is competed for by UK as well as North Continent ports. With different financing systems resulting in higher overall cost for UK terminal operators the latter are discriminated in competition.

2 Country reports for WP I and WP II

One of the problems to overcome is connected with the differences existing in the institutional set up of port sector in the countries under examination. As a matter of fact, the different legal and institutional framework does make it sometimes very difficult - if not impossible - to describe and frame the various single situations following a unique, homogeneous and comparable scheme.

As an example it may be mentioned that a clear definition of the various types of port infrastructure is often lacking. For this reason, the public investments can regard both the *access infrastructure* (channels, breakwaters, road and rail accessing the port, etc.) and other different works that may include both *terminal related infrastructure* and *suprastructure*.

When considering the financial flows from the private to public sector the problem arises to establish a clear distinction between the ports which are run as a comprehensive organisation and those organised according to the principle of *Landlord Port Authority*. Generally speaking, the former have a more consistent financial flow, as the various services are directly provided by the Port Authority; in the latter, on the contrary, the presence of various subjects implies a less consistent financial flows towards the Port Authorities. The main implications of this situation can be seen in the limited financial autonomy of some Port Authorities, that for this reason claim for a higher participation to the public revenues coming from port activities.

2.1 Italy

This paper is divided into two parts:

- the first one describes the Italian situation for financing the port infrastructure. The information provided will be integrated in the Workpackage I of the study entrusted by the Commission to the Consortium leaded by ISL (Task Ia and Task Ib);
- the second part of the document analyses the charging system of Italian ports, in order to collect information to be integrated in the Workpackage II of the study (Task IIa and Task IIb).

2.1.1 Task 1.A: Identification of system for public financing of seaports in Italy

This part of the report briefly explains the legal and institutional set up of Italian ports, with particular attention to the factors that more strongly influence the allocation of public funds. In this perspective this part is divided into two chapters: the first chapter describes the overall legal framework; the second one analyses the system presently in force for the allocation of public funds to port works.

2.1.1.1 The institutional set-up of ports established by the 1994 reform

It is well known that in 1994 a general reform of Italian ports came into force (Law 28 January 1994, n. 84, subsequently Law. 84/94).

Since that year, the Italian ports have abandoned the previous model of the Comprehensive Port Authority³ in favour of that of the Landlord Port Authority⁴.

The basic rules of the reform can be summarised as follows:

- the principal ports are administered by Port Authorities, which are public bodies endowed with a high degree of autonomy in port management and administration. These bodies basically take the form of Landlord Port Authorities, in that they are responsible for planning port development and ensuring that port operations are properly carried out. The remaining ports continue to be administered by the Maritime Authority (Harbour Master's Office). Special Chamber of Commerce departments (A.S.PO.) are to be found in three ports (Chioggia, Monfalcone and Gaeta); these have more limited responsibilities than the Port Authorities;
- traffic management and port operations are handled exclusively by private undertakings in all ports. The position of these private undertakings is different, according to whether they are simply "authorised" to operate within the port or whether they are "licensed" to carry out cargo loading/unloading operations in a specific port area. In this latter case, the company is regarded as a "terminal operator", and is responsible for organising and carrying out a complete and integrated transport cycle;
- the port areas are "demaniali" ("State property"), that is to say publicly owned and inalienable. They may be assigned to port operators against payment of a rent and under certain conditions, which are established by the Port Authorities or by the Maritime Authorities;
- technical-nautical services are regarded as services of public interest and are provided by private organisations under the supervision and general control of the Maritime Authorities and the Port Authorities. Pilotage and mooring are provided by "Corporations" (pilotage) or by "Groups" organised on a co-operative basis (mooring) which hold exclusive rights. The use of both services is compulsory, with a few exceptions for pilotage. Towage is carried out by private companies which, in every port, hold exclusive rights. In general, the use of the service is optional, though it may be declared mandatory in particular circumstances, if the Maritime Authorities deem this necessary for the safety of shipping in the port.
- Port Authorities are absolutely forbidden to carry out cargo handling activities, whether directly or through participation in companies which perform such activities. Nevertheless, the Port Authorities may hold shares in companies whose corporate purpose may be connected with their general objectives, such as, for example, the development of intermodal transport, logistics and transport networks.

³ With the term "Comprehensive Port Authority" we mean the cases where all port activities are considered to be of collective interest and are therefore seen as fulfilling a public service. These ports are therefore characterised by the extensive involvement of the Authorities that run them; this includes strict control over the various services and activities carried out in the port, or even their direct management. However, the approach is always that one of the performance of a public service and not of an entrepreneurial activity.

⁴ By "Landlord Port Authority" we mean the cases where the managing body of the port concentrates on territorial development and planning, while traffic management is regarded as an entrepreneurial activity to be freely carried out by private undertakings.

The implications of the legal status of port areas must be stressed. As part of the public domain (*"demanio pubblico"*), these areas can neither be sold, nor be acquired by positive prescription (*"usucapione"*); Port Authorities are only entrusted with their administration and do not have any property right on them. Furthermore, the irremovable works carried out on the port areas, regardless of whether realised by the Port Authority or by a private undertaking, are acquired by the State according to the *"devolution principle"* stated in the navigation code (art. 49). Regarding the realisation of port infrastructure, one can assert that Port Authorities act as a *"general contractor"* on behalf of the State, which remains the owner of the works. This institutional set-up, which is rooted in Italian juridical traditions, may be considered inconsistent with the recent evolution of the port industry; nevertheless, it must be recognised that it offers an argument for charging to the State the whole financing of port works.

The basic regulations whereby port areas are licensed to private operators are the same in every port, as are the regulations governing technical-nautical services.

As far as the amount of the rents is concerned, the law 84/94 defers to a Ministry Decree the settlement of the criteria to be followed, but this decree has not been issued until now. Anyway, the Port Authority must respect the minimum rents established at central level and may only overcome these general limits.

The port terminals are run by private entrepreneurs, who enjoy substantial autonomy. The few constraints that are placed upon them are justified on the grounds of safety or social harmony. The former case includes the obligation to utilise organisations holding exclusive rights for the services of pilotage and mooring. The latter case covers the terminal operators' obligation to call upon a single company to cope with "work peaks" and the ban on entrusting services to companies that are not expressly authorised by the Port Authority.

It should be pointed out that the presence of a Port Authority is very important: it enables co-ordinated and systematic actions to be taken in order to promote the port and to plan and develop infrastructure. Furthermore, it favours the relationship with the governmental authorities entrusted with the allocation of public funds. This is the main (if not the sole) reason for the continuous increase in the number of Port Authorities: from 18 when the law came into force to 24 today.

2.1.1.2 The classification of ports and the basic rules on financing port infrastructure

A relevant factor influencing port infrastructure financing is represented by the classification of ports, as the rules governing this matter differ according to the characteristics of the various ports. The Law 84/94 changed the previous classification and divided ports into two categories: military and commercial ports, the latter being divided into three classes, according to the relevance of the port: a) international, b) national and c) regional. In short:

- the ports belonging to the first category fall under the complete responsibility of the State, which is responsible for their maintenance and development;
- the ports belonging to the first two classes of the second category may be governed by a Port Authority. As noted above, the presence of a public body with general responsibility for port planning and management facilitates the relationship with the public powers and, therefore, the procurement of public funds;

- according to articles 5.8 and 5.9 of L. 84/94, the basic infrastructure⁵ in ports of the first and second class of the second category come under the responsibility of the State. Regions are in charge of the basic infrastructure in ports belonging to the third class of the second category. As basic infrastructure, the law mentions the following ones: maritime channels, breakwaters, basins, berths and dredging (art. 5.9 L. 84/94).

The Ministry of Transport is entrusted with the responsibility to analyse the plans elaborated by the Port Authorities in order to identify the *basic infrastructure* to be created in ports belonging to the first two classes of the second category (article 9.10 of L. 84/94).

The conclusion should be drawn that only the *basic infrastructure* can benefit from state funding, while the other port works come under the responsibility of different public bodies, such as Regions, Municipality and Port Authorities, or have to be financed by the private undertaking involved. Nevertheless, such a conclusion may be disputable for two main reasons: first, the respective responsibilities of the various bodies mentioned above remain uncertain; second, as far as the Port Authorities are concerned, they could reasonably be asked to finance port infrastructure only if they had adequate resources at their disposal, and this is not the actual situation in Italy. It must be added that Italian law does not define the various port infrastructure that cannot be qualified as basic infrastructure; most of all, the present Italian system does not take into consideration the distinction between *Public or General port infrastructure* and *User-specific infrastructure*. The former are the infrastructural works that belong to the public domain and to which all potential users have guaranteed access on equal, non-discriminatory terms; the latter are all those infrastructure designed for a particular user or category of users of the port, such as yards, jetties, pipelines and cables for utilities on the terminal sites of a port. This distinction, adopted in other countries as well as in some papers of the Commission⁶, could provide a satisfactory criterion for deciding whether a port work should benefit from public funds or not, and which port infrastructures must be charged to the Port Authorities or to the private undertakings. In principle, the financial responsibility of the private operators is asserted for the “superstructure” over the port area rented to a private leaser (as warehouses, semi-movable assets, etc.) but not clearly stated by the law.

2.1.1.3 The powers of the regions in port matters

First of all, it must be remembered that the Italian State is divided into twenty “Regioni” (Regions), which are public bodies embracing a certain number of “Province” (Provinces) and “Comuni” (Municipalities). Since 1977, Regions have enjoyed administrative autonomy and in various matters they also have legislative powers: owing to the recent evolutionary trends towards the implementation of a federalist set-up in Italy, such powers are increasing. Therefore, the question of identifying the power and the responsibility of Regions in the port field is gaining momentum.

In 1998 (Legislative Decree n. 112, of March 31st, art. 104) Regions were entrusted with the planning, design, construction, drainage and maintenance of the infrastructure of ports of

⁵ So called “Opere di grande infrastrutturazione”

⁶ See Vademecum on the Community rules on State aid and the financing of the construction of seaport infrastructure, 15.01.2002, p. 16.

regional interest. However, the Ministry of Transport has not yet arranged for the identification of the various categories of ports. This has given rise to a *vacuum* of rules of paramount importance, as the new criteria of classification are quite different from the previous ones; hence, the main difficulty in enforcing this new rule. Furthermore, a radical change was introduced into the Italian legal system by the constitutional law of 18 October 2001, n. 3, which modified article 117 of the Constitution. The constitutional reform shares out the various matters according to whether they fall under the **exclusive competence** of the State or under the **concurrent competence** of State and Regions. In the latter case, the competence of the Central Government is limited to defining the general principles, while the power to enact the pertinent laws and regulations is reserved for the Regions. Ports and navigation networks are classified as matters of **concurrent competence**, without any distinction between ports of national and regional interest.

However, the question of the new federalist set-up of the Italian State is still under discussion, as a new project of constitutional law has been approved by the Senate and is currently under evaluation by the Chamber of Representatives. At the moment of writing, it is difficult to assert exactly what the new division of powers and responsibilities between the State and the Regions will be, as the procedures for modifying the Constitution are very complex: a double deliberation of both Chambers is necessary, and a referendum could follow.

According to one interpretation, the State will in any case maintain the responsibility and the control of the major ports, as they are managed by public national bodies, which fall into the exclusive competence of the State according to the new art. 117 g) of the Constitution. Furthermore, an ordinary law modifying the L. 84/94 is also under discussion. This new law is oriented toward a restricted definition of the powers of Regions on port matters, by reserving for the State the competence for the most important ports.

Notwithstanding this uncertainty, it seems reasonable to forecast that the interventions of Regions in port matters will certainly grow. Meanwhile, the problem to be solved is that consistency needs to be ensured/guaranteed between the actions and programmes of Regions and the general planning of the Transport system, as the latter requires the full responsibility and involvement of the Central Government, while also taking into account the general framework of European planning.

2.1.2 The present responsibility for financing and realising port infrastructure and the procedures to be followed to get public funds

2.1.2.1 An attempt to describe the present share of responsibilities for financing and realising port infrastructure

At present, putting together the provisions of Law 84/94 and of Legislative Decree n. 112, of March 31st 1998, and taking into account the interpretation of Corte dei Conti (Central Court of national accounts) and the statements of ASSOPORTI, (Association of Italian Port Authorities) we can attempt to describe, in the following table, the present formal share of responsibility regarding the infrastructure of commercial ports.

Table 2-1: Present responsibility for financing and realising port infrastructure:

Ports/Infrastructure	Ports of international relevance	Ports of national relevance	Ports of regional relevance
Basic infrastructure, such as maritime access and defence, dredging, basins, road and rail links with the overall transport network.	Financing charged to the State (in principle, Regions and Port Authorities could contribute to financing with own resources). Realisation and maintenance entrusted to the Port Authorities, which receive a contribution from the State.		Financing realisation and maintenance charged to the Regions
Lighthouses, buoys and navigational aids	Financing, realisation and maintenance charged to the State.		Planning, financing, realisation and maintenance charged to the Regions
Infrastructure, such as quays, jetties, pier	Financing charged to the State (in principle, Port Authorities could contribute with own resources), Realisation and maintenance entrusted to the Port Authorities.		Planning, financing realisation and maintenance charged to the Regions
Superstructure related to a specific terminal, such as Terminal building, sheds, cranes, quay equipments, road and rail links inside the terminal	Financing, realisation and maintenance are generally charged to the body (private undertaking or public body) that exploits the terminal. Specific exceptions are possible.		Financing realisation and maintenance charged to the body (private undertaking or public body) that exploits the terminal.

Source: the various laws indicated in paragraph 1.2 – Elaboration: MARCONSULT

Nevertheless, the situation remains uncertain and the current practice does not always appear to be consistent with the above shown principles. As already mentioned, a clear definition of infrastructure and superstructure is still lacking; the classification of ports has not yet been defined; the power of Regions and their financing possibilities remain unclear. Furthermore, the whole legislation is currently under discussion.

It must also be noted that Italian Port Authorities, in the present situation, do not have sufficient means to finance the port infrastructure that come under their responsibility. They therefore claim a higher degree of financial autonomy through participation in revenues from port activities, in order to undertake the investments needed. The Government seems to be favourable to this solution: the bill of law under discussion establishes that the duties currently received, totally or partially, by the State should be wholly devolved to the Port Authorities.

Considering all these evolutionary trends, we do not think it is suitable to deal in further details with a very controversial question. For the purposes of the present study, it seems more appropriate to underline the uncertainty of the situation, and to focus on the practices actually followed in deciding the allocation of public funds for financing the various port infrastructure.

2.1.2.2 The system in force for the allocation of public funds to the port works

2.1.2.2.1 The system in force at the national level

At national level, the formal assignment of public funds in the national budget is the basic condition for granting public funds for any work.

This assignment of funds derives from the annual budgetary law (*legge finanziaria*) or, sometimes, from specific laws. The allocated funds are credited to the budgets of the various Ministries, which then distribute the funds after having verified the regularity of the liabilities

contracted by the various public bodies. As far as ports are concerned, until 2001 two Ministerial budgets were involved: the first one dependent on the Ministry of Public works; the second one on the Ministry of Transport and Shipping. In 2002, the two Ministries were merged into a single Ministry of Transport and Infrastructure.

Theoretically, the planning of infrastructure in individual ports should derive from the PGT (General Transport Plan). However, that document is somewhat generic and does not go beyond stating the *general principles* and the main *guide-lines* of the planning process.

In the light of the complexity of the matter, it is advisable to abandon the analysis of the principles and to mention the various laws that in the period 1998-2004 governed the allocation of public funds for port works.

2.1.2.2.2 Public funds allocated to ports from 1998 to 2004

The law dated 30 November 1998, n. 413, stated that a programme of enlargement and modernisation of ports was to be drawn up, on the basis of the Operational Plans presented by the Port Authorities or by the Maritime Authorities, taking into account the advice of the Regions involved. For this purpose 1,500 billion liras were allocated. The basic mechanism of financing was based on loans charged to the State.

The distribution of the funds among the various ports was implemented by two successive Ministerial Decrees, dated respectively 27 October 1999 and 23 May 2000.

The first Decree specified the various works to be realised. These were to be financed altogether by a sole loan charged to the State through a special Institute (Fondo di gestione Istituti contrattuali lavoratori portuali). The latter was responsible for assigning the funds to the interested Port Authorities which, in turn, when in a position to realise the planned works, were responsible for individual applications to the Institute for funding.

Subsequently the Decree of 23 May 2000 established a new distribution's criterion, defining only the whole figures to be allocated to the 20 recipient ports, without subdividing the total amount among the various works. This new approach was based on the consideration that Port Authorities are bound to work out and to submit to the Ministry of Transport the *Piano Operativo Triennale (Triennial Operational Plan)*, which explains the guide-lines of the strategic development of ports, as well as the actions to be undertaken and the works to be realised in order to achieve the planned objectives .

New additional funds, aimed at implementing the Law 413/1998, were allocated on two occasions:

- through the Law 23 December 1999, n. 488, (finanziaria 2000: i.e. the fundamental financial act for 2000), that made available 1,290 billion liras for a period of 15 years;
- with the Law 23 December 2000, n. 388 (finanziaria 2001), which set aside further 1,125 billions liras.

The total amount of 2,415 billions liras was shared among the various ports by the Ministry Decree dated 2 May 2001. This Decree modified the system for the allocation of funds, authorising each Port Authority (or other body beneficiary of the funds) to directly stipulate a loan within the maximum authorised amount.

Subsequently, the law 1 August 2002, n. 166, authorised a further allocation of € 34.000,000 for the year 2003, and of € 64,000,000 for 2004. Distribution among various ports was implemented by the Ministry Decree n. 5971 dated 16 October 2003.

Nevertheless, the Central Court of Accounts (*Corte dei Conti*) ruled that this Decree was unlawful owing to the absence of a definite programme and of any form of control of the choices made by the Ports' managing bodies regarding the works to be undertaken. On the contrary, the Court ruled that Port Authorities had to indicate the specific works benefiting from the loans. Therefore, the Transport Ministry issued a new Decree (3 June 2004) which approved the planning of various works needed for the enlargement, modernisation and rehabilitation of ports, but deferred the start of the works to the moment when Port Authorities had reached the relevant agreements with the various bodies involved in the planned infrastructure. It must be added that the last Ministry Decree (3 June 2004) stated that, at least a percentage of 20%, was to be reserved for projects aimed at the implementation of the "motorways of the sea". The following Ports are allowed to submit such projects: Genoa, Leghorn, Naples and Palermo in the Tyrrhenian Sea; Trieste, Monfalcone, Venice, Chioggia, Ravenna, Ancona, Bari and Brindisi in the Adriatic Sea; Catania in the Ionian Sea.

The various eligible projects should regard:

- realisation or improvement of Ro-ro terminals equipped with modern means of cargo handling;
- port areas equipped for the stay of lorries and drivers;
- improvements in the connections of ports with the hinterland;
- improvement in the water front;
- improvement in the security of ports as well as the safety of port operations.

Tables in Appendix describe the infrastructure projects approved by Transport Ministry Decrees 23 May 2000, 2 May 2001, and 3 June 2004. It can be noted that the analysis of the various works benefiting from public funds confirms what has been asserted above, i.e. that the present Italian system does not take into consideration the distinction between Public/general port infrastructure and User-specific infrastructure.

It must be noted that the formal allocation of funds does not mean that these funds will actually be utilised. Frequently, the complicated bureaucratic procedures regulating public works, as well as the environmental questions connected with port infrastructure, give rise to work stoppages. These practical difficulties are probably the underlying causes of the two main deviations pointed out in the reports of the "Corte dei Conti" (Central Court of national accounts):

- the poor utilisation of the funds allocated and, as a consequence thereof, the time lag in completing works: according to a survey of "Corte dei Conti" referred to the years 1999 – 2002, Italian Port Authorities had launched only 56% of the works planned;
- the transfer of funds toward works other than those that legally were to benefit from them.

It is worthwhile to stress another consequence of the long and complicated procedure previously described: the sums exposed in the annual accounts of the Port Authorities may sometimes be referred to works approved in the previous years and, according to the cases, already realised or under way at different degrees. Therefore, it is difficult to identify the works actually financed by the funds exposed in the annual accounts.

2.1.2.2.3 The present procedure for granting public funds to port works

Taking into account the rules mentioned above, the procedure for granting public funds to ports can be summarized as follows:

1. The Ministry of Transports and Infrastructures identifies the needs of the port sector and promotes the allocation of public funds in the national budget. A formal law is required for this purpose.
2. Port Authorities, as well as the bodies responsible for the other ports, work out the Piano Regolatore Portuale (Port Master Plan, henceforth PRP) and the Piano Operativo Triennale (Triennial Operational Plan, henceforth POT). The former explains the guidelines for the strategic development of port, the latter defines the actions to be undertaken and the works to be realised in order to reach the defined objectives. Although the POT should be grounded on the PRP, it is frequently enacted as first, owing to the arduous bureaucratic procedure required for the approval of PRP.
3. The PRP and POT are submitted to the Ministry of Transport and Infrastructure.
4. The Ministry of Transport, on the basis of pre-determined criteria and after consultation of the Regions involved, identifies the specific works to be financed, and submits them to the approval of the CIPE - Comitato Interministeriale per la Programmazione Economica (Economic Planning Interdepartmental Committee).
5. After the CIPE's approval, the Ministry shares by Decree the allocated funds among the various ports. The various laws and decrees affecting public funds among ports have been mentioned above.
6. Should the realisation of a basic infrastructure (*opera di grande infrastrutturazione*) be involved, Port Authorities have to stipulate with the central administration a "special agreement" (*Protocollo di Intesa*), defining the planning, the cost and the other conditions regulating the realisation of the infrastructure. It must be noted that the need for a previous "*Protocollo di intesa*" has been asserted by the Consiglio di Stato (*State Council*), which argued that basic infrastructure is a matter of *concurrent competence* of Port Authorities and Central Administration.⁷ Under this reading, the "*Protocollo di intesa*" is a preliminary condition for going ahead and must be signed before tenders are called for. Nevertheless, some Port Authorities do not agree with this interpretation, asserting that the "*Protocollo di intesa*" has the sole function of authorising the allocation of the funds and that it can therefore be stipulated when the tender procedures are fulfilled.

⁷ Consiglio di Stato, Statement n. 95 of September 2 1997.

7. Port Authorities call for a tender aimed at identifying the bank which offers the best condition for loaning the funds on the basis of the annual instalment granted by the State.
8. Once obtained the loan, Port Authorities call for tenders for the realisation of the infrastructure and grant to the winners the relevant contracts.

This is a very complicated procedure, which explains, at least partially, the shortages and the deviations mentioned above.

It must be added that the above procedure is not applicable to the aid assigned within the framework of special laws in favour of underdeveloped areas. Furthermore, a different regulation regards the works qualified of “strategic interest”, according to the law 21 December 2001, n. 443 (legge obiettivo). This law authorizes the Government at individuating the public and private infrastructure of strategic national interest and defines a simplified procedure for their approval and implementation.

As far as Italian ports are concerned, the list of works of strategic interest includes:

Table 2-2: Program of strategic works financing according to CIPE resolution 21st December 2001 - Law N. 443 21st December 2001

Ports	Million €.
Ancona	103,291
Civitavecchia	118,785
Taranto	51,646
Trieste piattaforma logistica	414,198
Gioia Tauro	92,962
Catania	10,846
Termini Imerese	1,549
Livorno Guasticce	25,823
conca di accesso e attrezzature porto di Cremona	57,843

Source: CIPE data – Elaboration: MARCONSULT.

2.1.2.2.4 Other sources of public funds

The general rules described in the previous paragraphs do not exhaust the subject of public funds aimed at financing port infrastructure, as in practice, other methods can be adopted.

Underdeveloped areas

Special laws (n. 341 of 1995 and n. 135 of 1997) have assigned public funds in favour of underdeveloped areas. The allocation of these funds follows a specific procedure. The following table describes the funds allocated to ports beneficiaries:

Table 2-3: Aids allowed by laws 341/95 and 135/97 for the underdeveloped areas - Euro

PORTS	Million €.
Castelvoturno	15,0
Civitavecchia	51,5
Pescara	14,2
Catania	15,5
Crotone	15,5
Brindisi	18,6
Genova	15,0
Porto Torres	20,7
Napoli	10,3
Gaeta	3,1
TOTAL	179,4

Source: CNEL data from "III Rapporto di monitoraggio degli investimenti infrastrutturali, 2004" (monitoring report on infrastructure investments) - Elaboration MARCONSULT

2.1.2.2.5 Specific laws in favour of single ports

Specific laws can be laid down, in order to allocate funds expressly to certain ports. As an example we can mention:

- law 1 December 1988, n. 879, in favour of areas devastated by earthquakes, assigning 90 billions liras for the modernisation of the port of Ancona;
- law 3 August 1998, n. 25 assigning about 12 billions liras for the rehabilitation and dredging of the Ports of Trapani and of Marsala;
- law 135/97 assigning 6 billions liras to the port of Gaeta;
- law 1 December 2003, n. 358, regarding the ports of Termini Imerese and Palermo. This law allotted to the Municipality of Termini Imerese € 10.194.000 from 2003 till 2005 in order to connect the port with the hinterland. The same law allotted the Port Authority of Palermo € 7.282.000, from 2003 to 2005, aimed at modernising the passenger terminal.

Programme agreements

When a programme requires the coordinated action of several public bodies, the law 8 June 1990, n. 142 empowers the bodies to stipulate a "*programme agreement*" (*Accordo di programma*), with a view to facilitating the implementation of the various actions. In the port field, it is worth mentioning the "*Accordi di programma*" regarding the ports of Cagliari and Gioia Tauro. The first of these, stipulated on September 21st 1995, envisioned public financing, from the Sardinia Region and the State, for all the works and equipments necessary for container cargo handling (quay cranes included) as well as for connecting the port with the hinterland. Furthermore, the terminal operator was exempted from any rent for five years. As for Gioia Tauro port, a first "*Accordo di programma*" was stipulated on 29th July 1994. In that document, 420 billions liras were estimated as the total investment for the start-up of the new Gioia Tauro port, out of which 132 billion were apportioned to public financing

and 288 billion to the operator entrusted with the management of the terminal (Contship); furthermore, the private operator was allowed to benefit from the communitarian structural funds, as the port was expected to play an important role in the development of Calabria's territory. Later on, in 2002, two new "*Accordi di programma*" came into force. The first of these, stipulated on 16th May 2002, laid down the guidelines for the implementation of the Calabria's general transport system and established the financial commitments of the various bodies involved; the second, stipulated on 29th July 2002, allocated to the commercial ports of Calabria a total investment of €. 292,000 million.

2.1.2.2.6 Aids assigned by regions

Sometime, Regions provide public funds through specific laws in favour of the ports located in their territory. As an example we can mention:

- the laws issued by the Lazio Region, granting loans on privileged terms to the ports of Civitavecchia and Gaeta (Law n. 12 of 1997 and Law n. 11 of 10 May 2001);
- the law issued by the Lazio Region (n. 8 of 16 April 2002), which assigned to Civitavecchia Port Authority an annual contribution of € 2.065.827,60;
- the decision of the Council of Campania Region that has allocated €. 12,6 million for port works.

Specific regional funds have been assigned to the Port of Trieste by the Region Friuli Venezia Giulia.

2.1.2.2.7 Communitarian funds

Finally, Italian ports can benefit from contributions granted by the Regions having Objective 1 or 2 status in the framework of the EU structural funds programmes. Such financial interventions of the Regions can be found in various Regions, such as Liguria, Lazio, Calabria.

2.1.3 Task I b: public financing in the ports of Genoa, Gioia Tauro and Trieste

The following chapters deal with port works benefiting from the public aids in the ports of Genoa, Gioia Tauro and Trieste, in compliance with the general laws mentioned above.

The different works are classified in the relevant categories indicated here-below.

RELEVANT CATEGORIES
<i>Access (or Basic) Infrastructures</i>
access channels (including disposal of dredging material)
navigation aids
turning basins
Breakwaters
roads accessing the ports and in the ports but outside terminals
rails accessing the port and in the ports but outside terminals
inland waterways
<i>Terminal-related infrastructures</i>
quays / docks
Jetties

RELEVANT CATEGORIES
stacking yards
land reclamation
<i>Suprastructures</i>
roads and rail at the terminal
terminal paving / surface finishing
port / office buildings
Warehouses
Cranes
mobile equipment

On the point and as already said, it is hereby confirmed that in Italy, a clear definition of the various types of port infrastructure is lacking. Furthermore, port financing is often allocated for complex projects involving interventions of different nature without indicating the specific allotment for each case and without reporting in the balance sheets the money spent for each intervention: in these cases, it is therefore difficult (if not impossible) to split the financing granted per any specific and single work. For all these reasons, when allocating the various expenses to the suggested categories, it has been very difficult to attribute them in an unequivocal way.

The information/data provided have been pulled out from the following sources:

- Reports of the Transport Ministry on the activity of Italian Port Authority in the years 2002 – 2003, with particular regard to the balance sheets published by the Ministry in the site www.infrastrutturetrasporti.it
- Reports of the Court of Accounts on the realisation and maintenance of Ports
- Operational plans of the ports of Trieste, Genoa and Gioia Tauro
- Information directly provided by the Port Authorities

For each of the three selected ports, the paragraphs are split as follows:

- Recall to the organisational framework and to the position of the port.
- Funds allocated by the laws mentioned in the previous part.
- Port works realised or under way in the reference period (2003) and financial sources.

In order to avoid misunderstandings, it is necessary to underline that owing to the lacking of a clear definition of the various types of port infrastructure and of the complexity of the projects benefiting from public funds, the classification of the port works in the three categories, when indicated, is not official and falls entirely under our responsibility, even if the officers of the Port Authorities have given a substantial contribution for the allocation of the various works.

Furthermore, as far as the figures reported in the following tables are concerned, two other factors are to be considered:

- the formal allocation of funds does not mean that these have been actually perceived. Frequently, the complicated bureaucratic procedures regulating public works, as well as the environmental questions connected with port infrastructure,

give rise to work stoppages. Hence the unsatisfactory utilisation of the funds allocated.

- the tables reporting the funds allocated for the various works consider the whole allocated amount. On the contrary, when reference is made to the figures indicated in the annual balance of accounts, it must always be remembered that the official accounts of Italian Port Authorities only describe the cash flows. Therefore the figures represent the sums actually perceived in the period.

This combination of circumstances explains the incongruence between the figures registered in the official financial accounts of the Port Authorities and those indicated in the various laws and decrees. Indeed, it frequently happens that a financial contribution registered into official accounts be referred to works realised in the previous years (or, according to the legal rule applicable, to works not yet under way).

2.1.4 Public financing in the port of Genoa

2.1.4.1.1 Recall of the commercial position of the port

The Port of Genoa is an important outlet to the sea for northern Italy's most industrialised area. Today, the Port of Genoa covers a total surface area of about 7 million square metres and extends continuously for 20 kilometres along a coastal strip protected by breakwaters, starting from the Old Port basin, at the city's historic centre, to the far western end, in the area of Voltri. It has 47 km of maritime works, including 30 km of operative quays, and 9-15 metre bottoms that in some points are 50 metres deep to accommodate the giant oil tankers. The Port can accommodate any type and size of ships and handle any type of dry and liquid cargo through the 13 connected Terminals: utilising the services of the terminals and their connections to the road and railway networks, the Port of Genoa can load and unload any type and size of containerised or non-containerised dry and liquid cargoes for ships of any class and tonnage. In 2003, port traffic was:

Table 2-4: Traffic of goods and passengers - year 2003

	Landed	Shipped	Total tons	Δ% 2003/2002
LIQUID BULKS	19.392.388	1.063.886	20.456.274	1%
mineral oils, gas	18.446.791	977.402	19.424.193	1%
other liquid bulks	945.597	86.484	1.032.081	7%
SOLID BULKS	19.157.862	14.099.343	33.257.205	5%
solid bulks	7.874.425	962.886	8.837.311	-1%
containers	6.544.178	8.526.981	15.071.159	6%
RO-RO	4.739.259	4.609.476	9.348.735	9%
Total tons	38.550.250	15.163.229	53.713.479	4%
N° ships	7.940	7.911	15.851	-5%
N° passengers	1.384.546	1.349.735	2.734.281	4%
N° containers (Teu)	801.650	804.296	1.605.946	5%
N° containers (no Teu)	544.203	543.902	1.088.105	3%

Source: Genoa Port Authority data – Elaboration: MARCONSULT

2.1.4.1.2 The financing of port infrastructure

Funds allocated by DM 27th October 1999 and by DM 23rd May 2000

The funds foreseen by the two first Decrees are shown in the following table. It is worth to remember that, the fund originally assigned, amounting to € 54.708.279,32, was afterwards reduced to € 50.925.907,54.

Table 2-5: Port financing according to DM 27th October 1999 of accomplishment of Law N. 413 30th November 1998 and amounts recalculation according to DM 23rd May 2000 – euro

port works	basic infrastructure	terminal-related infrastructure	port suprastructure	forecasted total financing	total financing (recalculated)
TOTAL	0,00	54.708.279,32	0,00	54.708.279,32	50.925.907,54
quays / docks yards (banchinamento perimetrale e piazzale 6° modulo Voltri)		27.609.785,83			
quays / docks (ristrutturazione calata Cappella - quota di cofinanziamento)		4.601.630,97			
quays / docks (banchinamento ponte ex idroscalo - ponte San Giorgio)		3.067.753,98			
quays / docks (consolidamento statico banchine testata ponti Ronco e Canepa)		7.669.384,95			
quays / docks (pontili petrolio - nuovo allineamento della banchina con piazzale retrostante - ristrutturazione pontili Alfa, Beta e Gamma, nell'ambito del riassetto di Mulfedo – stralcio)		11.759.723,59			

Source: Corte dei Conti data – Elaboration: MARCONSULT

Funds allocated by DM 2nd May 2001

With DM 2nd May 2001, additional funds - to be obtained through fifteen-year loans - were assigned for a total amount of € 107.371.389,32. The interventions foreseen against these financings were the following:

Table 2-6: Port financing according to DM 2nd May 2001 of accomplishment of law 488/99 (finanziaria 2000) and law 388/00 (finanziaria 2001) – euro

port works	basic infrastructure	terminal-related infrastructure	port suprastructure	total financing
TOTAL	3.600.000,00	64.972.610,00	3.780.000,00	107.371.389,32
terminal paving (costruzione per nuove vie di corsa per gru a levante Canepa e riqualificazione pavimenti aree ponte Somalia, calata Bengasi)			3.780.000,00	
quays / docks (realizzazione di un pontile nell'ambito portuale di Genova Sestri Ponente)		10.800.000,00		
quays / docks (recupero funzionale aree e pontile nell'ambito nuovo distretto industriale levante 1 lotto)		14.224.058,00		
quays / docks (Ponte Doria: nuovo banchinamento a ponente)		6.089.027,00		
rails in the port (recupero e ammodernamento degli impianti ferroviari portuali)	3.600.000,00			
quays / docks (recupero funzionale aree e pontile in ambito nuovo distretto industriale levane 2 lotto)		14.290.942,00		
quays / docks stacking yards (recupero funzionale aree polo alimentare e bunkeraggio e ampliamento terminal contenitori Calata Sanità)		19.568.583,00		

Source: Corte dei Conti data - Elaboration: MARCONSULT

From the official documents consulted, not all these various works result having been carried out: on the contrary, in the most favourable cases, they had been only awarded. In general, either the bureaucratic course was blocked waiting for advices or the relevant designs were not completed.

Funds allocated by DM 3rd June 2004

With the following DM 3rd June 2004, additional funds for a total of € 148.000.005,00 were allocated to Genoa port for the realisation of various works, as indicated in the Table of enclosure A to the Decree in question.

The amounts of funds and the kind of port works are confirmed by Genoa Port Authority.

Table 2-7: Port financing according to DM 3rd June 2004 of accomplishment of Law N. 166 1st August 2002 – in €.

port works	basic infrastructure	terminal-related infrastructure	port suprastructure	total financing
TOTAL	53.000.000,00	76.400.000,00	18.600.000,00	148.000.000,00
access channel (adeguamento imboccatura porto lato ponente)	3.000.000,00			
rails and yards in the port (riconfigurazione di piazzali viabilità e parchi ferroviari nel compendio Ponte Eritrea, Ponte Libia)			12.600.000,00	
quays / docks (terminal rinfuse - ampliamento testata P. Rubattino)		5.600.000,00		
quays / docks (recupero funzionale banchina molo Giano)		8.000.000,00		
quays / docks (nuovo banchinamento di Ponte Parodi)		9.000.000,00		
rails in the terminal (Voltri - rifunzionalizzazione delle vie di corsa e dei parchi moduli 3,4,5)			6.000.000,00	
disposal material (riempimento Calata Concenter)		14.800.000,00		
quays / docks yards buildings (potenziamento ed adeguamento bacini di carenaggio: pontile OARN e banchina sud bacino n.5, delocalizzazione da Molo Giano testata, opere marittime di servizio, realizzazione di nuovi spazi operativi e nuovi edifici demaniali)	50.000.000,00			
quays / docks (riempimento di Calata Bettolo e riconfigurazione Calata Olii Minerali - secondo lotto (interventi oggetto di riprogrammazione rispetto alla delibera 06/10/04))		39.000.000,00		

Source: Corte dei Conti data – Elaboration: MARCONSULT

The table reported here-below shows the works really carried out and their total amount, on the basis of the original documents of the Port Authority.

Table 2-8: Port works in Genoa – year 2003 (I)

PORT WORKS - YEAR 2003	law 413/98 euro	law 388/00 euro	law 166/02 euro
basic infrastructure			
quays / docks (recupero funzionale di Calata Olii Minerali e ampliamento Calata Bettolo)		30.000.000,00	
rails in the port (recupero ed ammodernamento infrastrutture ed impianti ferroviari portuali)		3.600.000,00	
access channel (adeguamento imboccatura porto lato ponente)			3.000.000,00
quays / docks - yards - buildings (potenziamento ed adeguamento bacini di carenaggio: pontile OARN e banchina sud bacino n. 5, delocalizzazioni da Molo Giano testata, opere marittime di servizio, realizzazione di nuovi spazi operativi e nuovi edifici demaniali)			50.000.000,00
total	0,00	33.600.000,00	53.000.000,00
terminal-related infrastructure			
quays / docks (lavori di riqualificazione degli attracchi di Calata Chiappella per adeguamento ai moderni fast ferriers 2a fase)	5.715.916,89		
quays / docks (lavori di consolidamento statico della banchina in testata a Ponte Canepa per approfondimento del fondale)	3.085.236,99		
quays / docks - yards (lavori di costruzione del 6° modulo di Voltri e connessi interventi)	29.058.963,89		
quays / docks (realizzazione del nuovo profilo di banchina lato ponente e testata a Ponte Andra Doria e fornitura nuova passerella imbarco/sbarco passeggeri)		6.001.631,80	
quays / docks (realizzazione di una nuova calata nell'ambito portuale di Sestri Fincantieri S.p.a.)		10.205.513,60	
quays / docks (recupero funzionale di Calata Olii Minerali e ampliamento Calata Bettolo)		15.000.000,00	
quays / docks (lavori di consolidamento e ristrutturazione del terminal traghetti di Ponte Colombo)		1.610.017,85	
quays / docks (terminal Rinfuse - ampliamento testata Ponte Rubattino)			5.600.000,00
quays / docks (recupero funzionale banchina Molo Giano)			8.000.000,00
quays / docks (nuovo banchinamento di ponente Ponte Parodi)			9.000.000,00

PORT WORKS - YEAR 2003	law 413/98 euro	law 388/00 euro	law 166/02 euro
disposal material (riempimento Calata Concenter)			14.800.000,00
disposal material - quays / docks (riempimento di Calata Bettolo e riconfigurazione Calata Olii Minerali - secondo lotto)			39.000.000,00
total	37.860.117,77	32.817.163,25	76.400.000,00
port suprastructure			
terminal paving / surface finishing (ostruzione di nuove vie di corsa per grues a levante di Ponte Canepa con riqualifica delle pavimentazioni di Ponte Canepa)		3.780.464,50	
equipment (interventi preliminari per la riprogettazione delle opere e degli impianti nel compendio dei bacini di carenaggio)		300.000,00	
warehouses (progetto relativo alla concentrazione su Calata Mogadiscio delle attività di sbarco e stoccaggio degli olii vegetali fluidi e dei vini - creazione capannone per il riempimento di fusi e lattine di olii vegetali)		3.000.000,00	
rail and yards (riconfigurazione di piazzali, viabilità e parchi ferroviari nel Compendio Ponte Eritrea/Ponte Libia - Ponte Somalia)		11.358.898,29	
rails and yards in the port (riconfigurazione di piazzali viabilità e parchi ferroviari nel compendio Ponte Eritrea/Ponte Libia)			12.600.000,00
rails in the terminal (Voltri - rifunzionalizzazione delle vie di corsa e dei parchi moduli 3,4,5)			6.000.000,00
total	0,00	18.439.362,79	18.600.000,00
TOTAL FINANCING	37.860.117,77	84.856.526,04	148.000.000,00

Source: Genoa Port Authority data – Elaboration: MARCONSULT

On the basis of the official documents of the Port Authority, the table here-below shows the total amount of the funds allocated for the port works carried out in the 2003, divided in the three relevant categories.

Table 2-9: Port works in Genoa – year 2003 (II)

PORT WORKS - YEAR 2003	law 413/98 euro	law 388/00 euro	law 166/02 euro	total financing
basic infrastructure	0,00	33.600.000,00	53.000.000,00	86.600.000,00
terminal-related infrastructure	37.860.117,77	32.817.163,25	76.400.000,00	147.077.281,02
port suprastructure	0,00	18.439.362,79	18.600.000,00	37.039.362,79
TOTAL FINANCING	37.860.117,77	84.856.526,04	148.000.000,00	270.716.643,81

Source: Genoa Port Authority data – Elaboration: MARCONSULT

The amount of public funds perceived for port works in 2003 by the Port Authority of Genoa from the State, Region or other public bodies, is reported in the following table:

Table 2-10: Public funds perceived for port works in 2003 by the Port Authority of Genoa

Contribution of the State for the ordinary maintenance	1.930.774
Other State	0
Region	1.659.188
Province, Municipality, other public Bodies	0
Contributions of the State for port works	1.043.910
Contribution of the State for extraordinary maintenance	5.016.226
Contribution of Region for port works	1.959.211
Province, Municipality, other public Bodies	1.032.914

Source: Genoa Port Authority data – Elaboration: MARCONSULT

2.1.5 Public financing in the Port of Gioia Tauro

2.1.5.1 Recall of the commercial position

The port was planned in the '70 years in connection with the realisation of a new steel plant in South Italy, but it remained incomplete and unserviceable owing to the abandonment of that project. The project was revamped in 1993, on the basis of an agreement among Government, Calabria Region and the Company Contship; as a consequence thereof, the Port is operating since 1995. The Port Authority of the Port has been established in the 1998: from that year till the 2000, it has been temporarily managed by an Extraordinary Commissioner. With the appointment of the President in 2001, the Port Authority is, since then, in full working order.

The port is fundamentally a hub container port and, in a few years, has reached a pivotal position in Mediterranean sea.

The growth of container traffic in the years 1995 – 2004 proves the strong development of the port.

Table 2-11: Container traffic - 1995-2004 - teu

Container traffic - 1995-2004 - teu			
Year	Landed	Shipped	Total
1995	8.330	8.670	17.000
1996	291.060	280.891	571.951
1997	732.599	715.932	1.448.531
1998	1.062.800	1.062.840	2.125.640
1999	1.126.750	1.126.651	2.253.401
2000	1.327.000	1.326.701	2.652.701
2001	1.245.000	1.243.332	2.488.322
2002	1.473.001	1.481.570	2.954.571
2003	1.566.727	1.581.935	3.148.662
2004	1.635.520	1.625.514	3.261.034

Source: Gioia Tauro Port Authority data – Elaboration: MARCONSULT

Table 2-12: Traffic of goods and passengers - year 2003

	Landed	Shipped	Total tons	Δ% 2003/2002
LIQUID BULKS	0	0	0	
mineral oils, gas	0	0	0	
other liquid bulks	0	0	0	
SOLID BULKS	12.810.885	12.653.932	25.464.817	
solid bulks	277.888	36.846	314.734	41%
containers	12.492.236	12.617.086	25.109.322	-1%
RO-RO	40.761	0	40.761	227%
Total tons	12.810.885	12.653.932	25.464.817	
N° ships	1.571	1.571	3.142	-6%
N° passengers	0	0	0	0%
N° containers (Teu)	1.566.727	1.581.935	3.148.662	5%
N° containers (no Teu)	993.601	993.601	1.987.202	1%

Source: Gioia Tauro Port Authority data – Elaboration: MARCONSULT

2.1.5.2 The financing of port infrastructure

As from the beginning, the social grounds played a main role in the decision of realising the port of Gioia Tauro: from one hand, the port was on the heart of an under-developed area and the Government considered of fundamental importance to develop some initiatives well fitted for replacing the previously forecasted steel plant; from another hand, the lack of a system of access infrastructure justified a major role of the public sector in providing them.

These basic conditions explain the lot of public intervention aimed at facilitating the start up of the port.

According to an “Accordo di programma” (programme agreement) stipulated on January 21th 1999 between the Ministry of infrastructure (the former Ministry of Public Works) and the Port Authority, a billion liras was allocated for the elaboration of a preliminary plan. Afterward, on

March 31st 1999, the “Contratto d’area” (area bargaining) for Gioia Tauro” was stipulated: it defined the engagements of the various public bodies for the elaboration of the Master Plan of the port. The “Contratto d’area” was the frame of reference of the subsequent public funds allocated by the various laws and decrees mentioned previously. The specific works benefiting from public funds are described here-below.

Funds allocated by DM 27th October 1999 and by DM 23rd May 2000

As already pointed out, DM 27th October 1999 has split among the various ports the funds foreseen by art. 9 of law 413/1998. To Gioia Tauro were allocated € 30.987.413,95 (Italian Liras billions 60.000), afterwards reduced with DM 23rd May 2000 to € 28.845.034,01 (Italian Liras billions 55,852). The amount effectively disbursed was further reduced so finally it resulted of € 27.062.341,51 (Italian Liras billions 52,400). All these works enter into the category of basic or access infrastructure, as shown by the following Table.

Table 2-13: Port financing according to DM 27th October 1999 of accomplishment of Law N. 413 30th November 1998 and amounts recalculation according to DM 23rd May 2000) – euro

port works	basic infrastructure	terminal-related infrastructure	port suprastructure	forecasted total financing	total financing (recalculated)
TOTAL	30.987.413,95	0,00	0,00	30.987.413,95	28.845.034,01
enlargement of the port channel	30.987.413,95				
enlargement of north turning basin					
increase of berthing opportunities					
widening the water depth of both channel and north turning basin					
extension of the western quay of the channel					

Source Corte dei Conti data – Elaboration: MARCONSULT

Funds allocated by DM 2nd May 2001

Subsequently, with DM 2nd May 2001 additional financings amounting to € 47.565.680,41 were allocated. Against this allocation, according to a survey of *Corte dei Conti* (Central Court of national accounts) dated 16th June 2004, the Port Authority had contracted loans amounting to a total of € 32.549.371,00 destined to the following port works.

Table 2-14: Port financing according to DM 2nd May 2001 of accomplishment of law 488/99 (finanziaria 2000) and law 388/00 (finanziaria 2001) – euro

Port works	basic infrastructure	terminal-related infrastructure	port suprastructure	total financing
TOTAL	22.549.371,00	0,00	10.000.000,00	32.549.371,00
various port works / dredging material (costruzione opere portuali varie, approfondimento fondali bacino nord del Canale)	1.549.371,00			
buildings (acquisto opere portuali varie complesso immobiliare "ex Isotta Fraschini" zona portuale)			10.000.000,00	
extraordinary maintenance / access channel (manutenzione straordinaria porto tratto imboccatura canale portuale e scivoli ro-ro)	17.400.000,00			
dredging material (costruzione opere portuali varie escavo canale porto refluento, manutenzione litorale)	3.600.000,00			

Source: Corte dei Conti data – Elaboration: MARCONSULT

Funds allocated by DM 3rd June 2004

Finally, DM 3rd June 2004 – of accomplishment of the law 266 dated 1st August 2002, that has refinanced the law 413/1998 and whose complete enforcement is still in question – allocated funds for an amount of € 87.411.021,60 for the following works:

Table 2-15: Port financing according to DM 3rd June 2004 of accomplishment of Law N. 166 1st August 2002 - euro

Port works	basic infrastructure	terminal-related infrastructure	port suprastructure	total financing
TOTAL	81.411.021,60	6.000.000,00	0,00	87.411.021,60
access channel (adeguamento attuale imboccatura portuale e bacino d'espansione)	15.411.021,60			
yard (piazzale retrostante banchina alti fondali)		6.000.000,00		
dredging material (escavo del canale e del bacino di espansione e refluimento a manutenzione del litorale)	4.320.000,00			
access channel (lavori di ampliamento del canale portuale nel tratto compreso tra l'imboccatura e gli scivoli ro-ro)	20.880.000,00			
dredging material (ampliamento bacino nord con formazione nuova imboccatura portuale e dragaggio fondali)	40.800.000,00			

Source: Corte dei Conti data – Elaboration: MARCONSULT

Funds allocated by: Law N. 443 of 21st December 2001 for works qualified of “strategic interest” (Legge obiettivo)

With CIPE resolution dated 21st December 2001 of approval of the first program of “strategic works”, in the framework of the realisation of the most important works of the port, an overall expense of € 92.962.000 was approved. For the quadriennium 2003-2006, the CIPE resolution dated 13th November 2003 approved the expenditure of € 76.162.000,00 for the following interventions.

Table 2-16: Program of strategic works financing according to CIPE resolution 21st December 2001- Law N. 443 21st December 2001 – euro

Recipient of the funds	Gioia Tauro Port Authority			
CIPE resolution	N 89/2003 13th November 2003			
Accrual years	2003	2004	2005	2006
	4.570.000,00	7.616.000,00	52.094.000,00	11.882.000,00

Source: CIPE data – Elaboration: MARCONSULT

The total amount was recalculated as indicated in the following table.

Table 2-17: Port works in Gioia Tauro – year 2003

Port works	basic infrastructure	terminal-related infrastructure	port suprastructure	total financing - euro
				67.336.045,00
network of hinterland connection – Hub interportuale Gioia Tauro				
rails connections (rete ferroviaria)	2.690.000,00			
warehouses (capannoni prefabbricati)			4.794.465,00	
roads and yards lighting (illuminazione strade e piazzali)			1.388.725,00	
pedestrian access (ingressi pedonali)			1.478.000,00	
laboratory of phytopathology (laboratory fitopatologici)			223.000,00	
warehouses (magazzini piastra del freddo)			26.460.125,00	
parking (parcheggio multipiano)			7.115.000,00	
hydric network (rete distribuzione idrica e fognaria)	5.250.000,00			
electric network (reti elettriche e trasmissione dati)	2.175.730,00			
regasifier plant (collegamento rigassificatore e piastra del freddo)			10.350.000,00	
yards (sistemazione piazzale Nord)			438.000,00	
roads (strada di collegamento S. Ferdinando Piazzale Nord)	4.973.000,00			

Source: Gioia Tauro Port Authority 2003 Annual Report – Elaboration: MARCONSULT

The amount of public funds for port works in 2003 allocated to the Port Authority of Gioia Tauro from the State, Region or other public bodies, is reported in the following table:

Table 2-18: Public funds perceived for port works in 2003 by the Port Authority of Gioia Tauro

Contribution of the State for the ordinary maintenance	867.648
Other State	0
Region	100.000
Province, Municipality, other public Bodies	0
Contributions of the State for port works	19.023.793
Contribution of the State for extraordinary maintenance	0
Contribution of Region for port works	0
Province, Municipality, other public Bodies	0

Source: Gioia Tauro Port Authority data – Elaboration: MARCONSULT

2.1.6 Public financing in the Port of Trieste

2.1.6.1 Recall of the commercial position

Owing to its position in the Northern Adriatic sea and to its connection with Central Europe, the port of Trieste could play a pivotal role in various types of traffic. Nevertheless, until now, the results have not been consistent with the expectations of the port.

The following table describes the traffic of the different cargo categories in the year 2003.

Table 2-19: Traffic of goods and passengers - year 2003

	Landed	Shipped	Total tons	Δ% 2003/2002
LIQUID BULKS	35.662.880	89.123	35.752.003	
mineral oils, gas	35.654.102	76.650	35.730.752	0%
other liquid bulks	8.778	12.473	21.251	42%
SOLID BULKS	5.492.889	4.973.109	10.465.998	
solid bulks	1.864.858	978.800	2.843.658	-19%
containers	638.190	738.137	1.376.327	-29%
RO-RO	2.714.389	3.078.260	5.792.649	8%
other	275.452	177.912	453.364	-43%
Total tons	41.155.769	5.062.232	46.218.001	
N° ships	2.304	1.873	4.177	-5%
N° passengers	168.341	154.080	322.421	2%
N° containers (teu)	58.872	59.526	118.398	-35%
N° containers (no teu)	0	0	0	0%

Source: Trieste Port Authority data – Elaboration: Marconsult

2.1.6.2 The financing of port infrastructure

Funds allocated by DM 27th October 1999 and by DM 23rd May 2000

With DM 27th October 1999 and DM 23rd May 2000, Trieste Port Authority obtained a financing amounting to € 25.667.907,88 for the construction of the Adria Terminal in the port area named “Punto Franco Vecchio”. Further on, this amount was reduced to €

23.839.303,62. For this intervention, a total amount of € 18.271.616,52 was really paid within 2003.

Table 2-20: Port financing according to DM 27th October 1999 of accomplishment of Law N. 413 30th November 1998 and amounts recalculation according to DM 23rd May 2000) – euro

Port works	basic infrastructure	terminal-related infrastructure	port suprastructure	forecasted total financing	total financing (recalculated)
TOTAL	0,00	25.667.907,88	0,00	25.667.907,88	23.893.303,62
quays / docks (realizzazione Adria Terminal nel Punto Franco Vecchio)		25.667.907,88		25.667.907,88	

Source: Corte dei Conti data – Elaboration: MARCONSULT

Funds allocated by DM 2nd May 2001

With the DM 2nd May 2001, € 58,876,086,60 were allocated to Trieste Port Authority to carry out big infrastructural works destined at creating a new “logistic platform” including quays and related operating yards in the area between the Scalo Legnami (timber terminal) and the ex Italsider area (iron and steel plant). Against this financing, three loan contracts for a total of € 53.464.503,29 result having been already signed.

These works have been included among those of “strategic interest” foreseen by the “Legge obiettivo”.

Table 2-21: Port financing according to DM 2nd May 2001 of accomplishment of law 488/99 (finanziaria 2000) and law 388/00 (finanziaria 2001) – euro

Port works	basic infrastructure	terminal-related infrastructure	port suprastructure	funds received by A.P.	total financing
TRIESTE	€. 0,00	€. 53.464.503,00	€. 0,00	€. 53.464.503,00	€. 58.876.086,50
lavori di infrastrutturazione, mediante banchinamento e realizzazione dei piazzali retrostanti l'area compresa fra lo scalo legnami e l'ex Italsider - piattaforma logistica		53.464.503,00			

Source: Corte dei Conti data - Elaboration: MARCONSULT

Funds allocated by: DM 3rd June 2004

Finally, DM 3rd June 2004 – of accomplishment of law n. 266 of 1st August 2002, that has refinanced law 413/1998 – allocated funds for an amount of € 63.974.828,00 for the following works:

Table 2-22: Port financing according to DM 3rd June 2004 of accomplishment of Law N. 166 1st August 2002

Port works	basic infrastructure	terminal-related infrastructure	port superstructure	other	total financing
TRIESTE	€. 2.000.000,00	€. 61.974.828,00	€. 0,00	€. 0,00	€. 63.974.828,00
variante escavo per diga foranea	2.000.000,00				
lavori di infrastrutturazione mediante banchinamento e realizzazione dei piazzali retrostanti dell'area compresa tra lo scalo legnami e l'ex Italsider		61.974.828,00			

Source: Corte dei Conti data - Elaboration: MARCONSULT

Funds allocated by Law N. 443 of 21st December 2001, for works of “strategic interest” (Legge obiettivo)

The CIPE, decision of 21th December 2001 included the works above in the list of works of strategic interest. Afterwards, the CIPE resolution of 20th December 2004 allocated further 272.000.000 €, to be partially financed by loans charged to the State according law 413/98 (€ 2.000.000) and law 166/2002 (44.800.000), while the remaining 225.200.000 € are still to be financed. As a matter of fact, the situation is not completely defined, because a new programme submitted to CIPE foresees a different distribution of the financial sources with a greater participation of the private undertakings. The public funds available owing to this shift from the public to the private resources would be utilised for other works.

To come to a conclusion, we can summarise the formal allocation of public funds for port works in the Port of Trieste in the last years as follows.

Table 2-23: Public funds perceived for port works in the last years

Port works	Financial sources (€)		Funds totally allocated
	Law 413/98 and Law 488/99	Law 166/2002	
Basic/access infrastructure			
Extension of breakwater	13.464.503,00	2.000.000,00	15.464.503,00
Terminal related infrastructure			
Adria Terminal	23.893.303,62	-	23.893.303,62
New logistic platform (scalo legnami)	40.000.000,00	61.974.828,00 44.800.000,00	146.774.828,00
Superstructure	-	-	-
Total	77.357.806,62	108.774.828,00	186.132.634,62

It is worthwhile to remember that the classification of the various works in the three categories adopted in our study is not officially and in some cases can rise to doubts, as port financing are often allocated for complex projects, without indicating the specific allotment for each intervention. Furthermore, it must be stressed that the formal allocation of public funds

does not mean that these are actually perceived, owing to the complicated bureaucratic procedure regulating the public expenditure (see above, page 15).

In order to have a clear vision of the public funds actually perceived in each year from the Port of Trieste, reference can be made to the public balance sheet of the Port Authority, which describes the financial flow occurred in that year. According to the balance sheet of 2003, the amount of public funds allocated for port works in 2003 by the Port Authority of Trieste from the State, Region or other public bodies, is reported in the following table:

Table 2-24: Public funds allocated for port works in 2003 by the Port Authority of Trieste

Total contributions of the State for port works	20.242.000
Contribution of the State for extraordinary maintenance	5.923.000
Contribution of the State for the ordinary maintenance	741.200
Contribution of Region for port works	4.866.552
Other contributions of the State	310.273
Other contributions of the Region	7.156.737

Source: Port Authority data – Elaboration: MARCONSULT

It is worthwhile to note that the contribution of the Region Friuli Venezia Giulia for the general expenses of the Port of Trieste dates back to 1987 (Regional Law n. 22), that is before the reform of the Italian port system. Afterward, various regional laws issued special contribution for the port: regional law 5 February 9 December 1992, n. 4; regional law 14 February 1995, n. 10; regional law 26 June of 2001 n. 16, and finally the regional law 29 January 2003, n. 1).

2.1.7 WP2: charging practices of seaports in Italy: General framework of the charging system of Italian ports

2.1.7.1 Port dues

In Italy, the Port managing bodies (i.e. the Port Authorities for the biggest ports and the Maritime Authorities for the others ports) are not entrusted with cargo handling activities and with supplying of technical-nautical services, as the various ports services are provided by private organisations, which perceive directly the compensations for the services they provide. Under this reading, the terminal operators, which act in a competitive framework, and the organisations supplying the technical – nautical services, which enjoy a monopolistic position, are in the same situation: the sums they perceive have nature of “prices” and the Port Authorities do not have any participation in the revenues deriving from these services.

Taking into account this basic situation, we prefer to utilise the term “Port dues” in the strict sense of the word, meaning the sums perceived by an Authoritarian power (the State or other public body) versus the general utilisation of the port infrastructure. As a consequence thereof, this term does not cover either the tariff paid for cargo loading/unloading operations or the tariffs for technical – nautical services and for other general services eventually provided by the Port Authority itself.

Under this reading, three types of Port Dues are collected in Italian Ports:

- the anchorage tax (tassa di ancoraggio);
- the State tax on cargo (tassa erariale sulle merci sbarcate e imbarcate);

- the port tax on loaded and unloaded cargo (tassa sulle merci sbarcate e imbarcate) in a few ports.

2.1.7.1.1 State tax on cargo

The state tax on cargo is applied in every port with different percentages, according to the various cargoes typologies. Until 1994 the 33% of this tax was perceived by the existing Port Managing Bodies. The 1994 reform has transferred to the State the total amount, under the consideration mentioned above.

2.1.7.1.2 Port tax on loaded and unloaded cargo

Until the 1994 reform, the Customs Authority levied this tax in some specified ports, but transferred the total amount to the existent Port Managing Bodies. The law 84/94 extended the tax to all ports and limited the participation of the Port Authorities to the 50%.

2.1.7.1.3 Anchorage tax

The anchorage tax is applied on each ship (both flying national or foreign flag) calling at Italian ports, on the basis of the net tonnage; it is collected by the Customs Authority (local representative of Ministry of Finance) and it is budgeted in the State accounts. Until 1994 about 80% of the sums perceived were transferred to the existing Port managing Bodies. With the 1994 reform, all the revenues of the tax have been acquired by the State, as a compensation of the previous loans contracted by the Port Authorities and charged to the State.

A bill under discussion by the Parliament provides the transfer of the whole amount of the three Port Dues to the Port Authorities.

2.1.8 Task II a: Charging practices related to port operators

The private undertakings (terminal operators or other industrial or commercial operators) are compelled to pay to the Port Authority:

- rents for the grant of the port areas leased in concession,
- fees due for the release of authorization to act as private undertakings within the port boundaries.

The general criteria for granting the port areas to private undertakings are stated in art. 18 of law 84/94. The law provides that the areas are to be granted according to a public procedure. The determination of the procedure to be followed was deferred to a Decree of the Ministry of Transport, but this regulation has not yet been issued. As a matter of fact, the single Port Authorities have made up this lack of regulation by fixing themselves the rules to be followed, in order to assure all interested parties of the opportunity to apply for the grant of the available areas.

The determination of the amount of rents is also deferred by the law 84/94 to a Ministry Decree but, once more, this decree has not been issued until now. Anyway, as already pointed out, the Port Authority must respect the minimum rents established at central level and may only overcome these general limits.

As a matter of fact, each Port Authority issues the rules and the criteria for establishing the amounts of the rents. In general terms they must be proportioned to the extension of the leased area, but the basic rent can be increased or reduced according to the specific conditions of the same. As for example: the utilisation of the area may justify the application of a destination coefficient⁸; furthermore, the existence of suprastructure realised by the Port Authority may bring about the increase of the basic rent in a percentage of the value of the suprastructure. On the other hand, a reduction of the basic rent may arise from the level of investments burdened on the private undertaking.

Within these general rules for defining the rents, Port Authorities enjoy a certain discretionary power in selecting the leaser, as they can take into account the general objectives of ports development, the advantages that the lease contract may bring to the economic development of the ports, the level of competition that the terminal operator must face, etc. However, should a port operator claim to be discriminated, he is allowed to appeal to the Administrative Court (TAR – Tribunale Amministrativo Regionale) against the decision of the Port Authority.

In principle, the terminal operators or the port undertakings are responsible of the warehouses, the mobile assets (self moving, trailers, etc.) or semi-mobile ones in their area. However, most of the existing warehouses and quays fixed facilities (cranes) on the port territory have been built/bought in the past years by the State or by other public corporate bodies and thereafter entrusted in concession to private undertakings for the operational management. Therefore, the Port Authorities that succeeded the pre-existing port management bodies, in all cases where they have not sold these equipments to private undertakings, have rented or given them in concession. In very particular cases, in the framework of the policy of developing the lagging areas, these equipments have been allowed free of any charge for a limited period.

2.1.9 Task II b: charging practices related to ship operators

Ship operators have to pay to the Customs Office the Port Dues mentioned in paragraph 6.1:

- the anchorage tax (tassa di ancoraggio)
- the State tax on cargo (tassa erariale sulle merci sbarcate e imbarcate)
- the port tax on loaded and unloaded cargo (tassa sulle merci sbarcate e imbarcate) in a few ports.

As already remembered, these dues are partially transferred to the Port Authority.

Direct payments to the Port Authority may occur for the provision of some services of general interest, as water supply, bunkering and waste reception facilities. Sometimes Port Authority perceives a specific fee for passengers embarked and disembarked.

Other payments are supplied for commercial activities (technical nautical services, cargo handling tariffs) and do not refer to the scope of the study.

⁸ As for example, in Genoa the coefficient is 1 for the areas dedicated to container traffic, 0,9 for general cargo and 0,8 for bulk.

2.1.10 General view of the financial flows within Italian ports

At the end of our Study, it is suitable to summarize in the following table the financial flows between the Port Authorities and the private undertakings.

Payment from:	Cause of the payment	Recipient of the payment	Final beneficiary
terminal operators	rents paid for the grant of the port areas	Port Authority	Port Authority
	rents of the use of equipment owned by the Port Authority (if any)	Port Authority	Port Authority
	fee for the right to carry out an authorized activity (<i>licenza d'impresa</i>)	Port Authority	Port Authority
	compensation for services of general interest provided by Port Authority (e.g. public lighting, cleaning of port areas, maintenance of common part of the port ⁽²⁾)	Port Authority	Port Authority
vessel operators	compensation for services of general interest provided by Port Authority (e.g. water supply, bunkering and waste reception facilities)	Port Authority	Port Authority
	fee for passengers embarked and disembarked ⁽¹⁾	Port Authority	Port Authority
	State tax on cargo	Customs office	State
	tax on loaded and unloaded cargo	Customs office	50% State and 50% Port Authority
	anchorage tax	Customs office	State
other port operators (cargo handling enterprises and provider of services)	fee for the right to carry out an authorized activity (<i>licenza d'impresa</i>)	Port Authority	Port Authority
	compensation for services of general interest provided by Port Authority (e.g. public lighting, cleaning of port areas, maintenance of common part of the port)	Port Authority	Port Authority
	rents paid for the grant of the port areas	Port Authority	Port Authority

Note:

(1) not in every port

(2) Port Authority receives from the State a specific contribution

Source. Various official Documents - Elaboration MARCONSULT

A summary of the revenues perceived by the Port Authorities is indicated here below.

Revenues of the Port Authority	Payment from:
rents paid for the grant of the port areas	terminal operators and other port operators (cargo handling enterprises and provider of services)
fee for the right to carry out an authorized activity (<i>licenza d'impresa</i>)	terminal operators and other port operators (cargo handling enterprises and provider of services)
rents of the use of equipment owned by the Port Authority (if any)	terminal operators
compensation for services of general interest provided by Port Authority	terminal operators, vessel operators and other port operators (cargo handling enterprises and provider of services)
fee for passengers embarked and disembarked (1)	vessel operators
tax on loaded and unloaded cargo (2)	State
contribution by the State for the investment	State
contribution from the State for the ordinary maintenance	State
contribution from the State for the extraordinary maintenance	State
Regions legal provision (3)	Region
contribution of the Municipality for specific work of common interest	Municipality
Note: (1) only in a few ports (2) the tax is paid by vessel operator to the Customs Authority and it's 50% is transferred to Port Authority (3) reference is made to Regions legal provisions foreseeing financial contributions for the ordinary management of ports and/or for overcoming social problems	

Source: various official documents – Elaboration: MARCONSULT

2.1.11 Final considerations

The exposed situation makes it clear that Italian Port Authorities do not have consistent autonomous resources.

Presently their main incomes derive from the rents paid by private undertakings for the grant of the port areas and for the use of equipment owned by the Port Authorities.

Other minor revenues of Port Authorities, apart from the participation to the income of the port dues as indicated above, can derive:

- from the sums paid by private undertakings for the grant of the authorisation for operating within the port boundary:
- from the tariffs perceived for the supply of services considered of general interest: public lighting, cleaning of port areas, maintenance of common parts. Other port services (such as waste collection, water supply, electricity and telephone connection to ships, etc.) are, in principle, entrusted to private concessionaires but can be temporarily carried out also by Port Authorities;
- from the dues applied in some ports on the passengers embarked on the cruise ships.

Furthermore, Port Authorities receive by Central Government contributions for the *ordinary and extraordinary maintenance of the common parts in the port area*. The amount of these contribution is fixed by special conventions stipulated every two years.

As already noted, Italian Port Authorities do not have sufficient means to finance port infrastructure that come under their responsibility. This is the reason why they claim a higher degree of financial autonomy in order to face the investments needed, through a higher participation in revenues coming from port activities. The Government seems to be favourable to this solution: the bill of law under discussion establishes the whole devolution to Port Authorities of the port revenues currently perceived, totally or partially, by the State.

2.1.12 Annex

Port financing according to DM 3rd June 2004 of accomplishment of Law N. 166 1st August 2002 - euro					
Port works	basic infrastructure	terminal-related infrastructure	port suprastructure	other	total financing
PORT	541.985.190,66	685.755.598,30	82.248.251,23	115.910.959,82	1.425.900.000,01
ANCONA	46.590.053,69	3.780.464,50	0,00	0,00	50.370.518,19
AUGUSTA	1.695.960,00	7.450.160,00	0,00	0,00	9.146.120,00
BARI	0,00	64.000.000,00	0,00	0,00	64.000.000,00
BRINDISI	25.207.200,00	15.250.800,00	0,00	5.000.000,00	45.458.000,00
CAGLIARI	3.257.397,12	7.192.828,27	5.241.826,85	414.558,71	16.106.610,95
CATANIA	12.600.000,00	26.089.436,46	13.600.000,00	0,00	52.289.436,46
CHIOGGIA	0,00	11.400.000,00	0,00	0,00	11.400.000,00
CIVITAVECCHIA	18.227.109,88	99.752.458,97	8.640.000,00	0,00	126.619.568,85
GENOVA	15.600.000,00	41.400.000,00	18.000.000,00	73.000.000,00	148.000.000,00
GIOIA TAURO	87.411.021,60	0,00	0,00	0,00	87.411.021,60
LA SPEZIA	18.592.448,37	35.122.592,03	1.485.758,50	8.399.201,11	63.600.000,01
LIVORNO	36.780.000,00	66.720.000,00	9.400.000,00	4.320.000,00	117.220.000,00
MANFREDONIA	0,00	0,00	0,00	5.000.000,00	5.000.000,00
MARINA DI CARRARA	42.000.000,00	0,00	0,00	0,00	42.000.000,00
MESSINA	37.404.000,00	0,00	22.596.000,00	0,00	60.000.000,00
MONFALCONE	0,00	11.400.000,00	0,00	0,00	11.400.000,00
NAPOLI	36.192.000,00	62.639.629,55	0,00	0,00	98.831.629,55
OLBIA	26.400.000,00	0,00	0,00	0,00	26.400.000,00
PALERMO	24.000.000,00	10.093.706,40	0,00	0,00	34.093.706,40
PIOMBINO	0,00	54.897.600,00	0,00	0,00	54.897.600,00
RAVENNA	44.200.000,00	19.800.000,00	0,00	0,00	64.000.000,00
SALERNO	0,00	45.332.453,95	3.284.665,88	0,00	48.617.119,83
SAVONA	6.228.000,00	4.958.400,00	0,00	19.777.200,00	30.963.600,00
TARANTO	0,00	32.960.240,17	0,00	0,00	32.960.240,17
TRIESTE	2.000.000,00	61.974.828,00	0,00	0,00	63.974.828,00
VENEZIA	57.600.000,00	3.540.000,00	0,00	0,00	61.140.000,00

Country reports for WP I and WP II

Port financing according to DM 2nd May 2001 of accomplishment of law 488/99 (finanziaria 2000) and law 388/00 (finanziaria 2001) – euro	
Port works	total financing
	1.247.243.411,30
ANCONA	63.059.387,38
AUGUSTA	12.859.776,79
BARI	39.199.078,64
BRINDISI	49.579.862,31
CAGLIARI	36.410.211,39
CATANIA	48.960.114,03
CHIOGGIA	15.493.706,97
CIVITAVECCHIA	69.721.681,38
GENOVA	107.371.389,32
GIOIA TAURO	47.565.680,41
LA SPEZIA	55.312.533,89
LIVORNO	70.341.429,66
MARINA DI CARRARA	39.199.078,64
MESSINA	30.987.413,95
MONFALCONE	12.859.776,79
NAPOLI	102.258.466,02
OLBIA	13.169.650,93
PALERMO	61.974.827,89
PIOMBINO	46.481.120,92
RAVENNA	72.355.611,56
SALERNO	30.987.413,95
SAVONA	36.100.337,25
TARANTO	69.256.870,17
TRIESTE	58.876.086,50
VENEZIA	56.861.904,59

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Port financing according to DM 23rd May 2000 of accomplishment of Law N. 413 30th November 1998 (amounts recalculation) - euro	
Port works	total financing
	528.835.227,15
ANCONA	23.797.156,39
BARI	14.278.292,80
BRINDISI	18.561.786,32
CAGLIARI	23.797.152,91
CATANIA	19.230.022,67
CIVITAVECCHIA	30.936.336,36
GENOVA	50.925.907,54
GIOIA TAURO	28.845.034,01
LA SPEZIA	25.224.982,57
LIVORNO	38.075.445,06
MARINA DI CARRARA	9.720.751,75
MESSINA	13.326.405,92
NAPOLI	46.897.218,88
PALERMO	25.700.924,97
PIOMBINO	23.797.152,77
RAVENNA	31.359.366,20
SAVONA	16.845.453,37
TARANTO	34.590.006,04
TRIESTE	23.893.303,62
VENEZIA	29.032.526,97

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2.2 Slovenia

2.2.1 The slovenian situation, the port of Koper and the position of Luka Koper

Three are the ports of a certain importance located in the Slovenian sea coasts: Koper, Izola and Piran. However, due to the reduced dimension of the country and the limited extension of the Slovenian sea coasts (46 kilometres), to write about Slovenian ports and maritime problems is the same as to write of the port of Koper, the only Slovenian maritime infrastructure fitted and qualified to handle sea-borne cargo and international traffic and capable to supply the internal and international market with all types of cargo and logistic operations.

As a matter of fact, owing to its favourable geographical position, Koper has been (and still is) an important maritime centre, a considerable crossroad of sea and land trade routes. Lying on the shortest transport route between the Mediterranean and the Near and Middle East and through the Suez Canal, the Far East countries, Koper represents too an important point of connection between Central-East European and overseas countries. It constitutes also an important logistic and distribution centre, being more than 2000 nautical miles closer to Far East countries than Northern European ports. Finally, distances from Koper to main Central European centres are also around 500 km. shorter than from main Northern European ports: a good time saving or a faster cargo receipt and, almost always, lower costs for cargo.

Finally, to analyse the Koper port situation means exactly to examine the Luka Koper history, since that Company is managing the port as from 1960 thus representing the continuity, notwithstanding the big political changes occurred:

- in 1991, with the dissolution of the Yugoslav Federal Republic and the declaration of independence of Slovenia and of the other countries which were constituting the former Yugoslav Federal Republic.
- in 1993, with the return of Slovenia to the regime of the private property.

For all these reasons, the Slovenian port and maritime analysis will be based on the examination of the port of Koper reality that completely covers and represents the Slovenian country's situation.

To complete the picture – based on limited data due to the short period of existence of the Republic of Slovenia as an independent country and on few official documents in English language - a brief preliminary recall of the basic principles of the Slovenian ports and maritime legislative framework is summarised later on.

2.2.2 The present slovenian ports basic legislative framework

The most important provisions on Slovenian ports should be contained in articles 32, 33 and 34 of the Slovenian Maritime Code: unfortunately, notwithstanding our repeated attempts, Luka Koper management has been unable to furnish an official English translation either of the entire Code or of the above mentioned articles.

Furthermore, according to Luka Koper documents and verbal information obtained from the same source, all port matters result under the responsibility of the Ministry of Transports that

is also responsible for the national maritime policy, through two specialised bodies: a) the Slovenian Maritime Directorate (a maritime administration established in Koper since 1995 as a part of the same Ministry); b) the Maritime Office of the Republic of Slovenia (a State institution established in 1997 within the same Ministry, organised as a Ministry's office, and located in Ljubljana).

According to the same source, the two official bodies control and supervise all ports, sea traffic and maritime matters.

In particular, the Slovenian Maritime Directorate results responsible of maritime safety, preparation of maritime documents (including maritime laws and executive regulations drafting), adoption and introduction of international maritime standards and technical regulations, international cooperation, preparation of bilateral and multilateral agreements, etc.. Accordingly, Slovenian Maritime Directorate, carries out a wide range of tasks which include all main aspects of maritime activity in port and at sea. So, it covers all topics and provisions concerning safety at navigation, seaways, pollution prevention, search and rescue operations, ships' registration, ship's survey, release of ship's certificates and other document regarding ships' life, port state control, issuing of seafarers certificates, registration of pleasure boats, etc.. Its main tasks are, however, safety at sea, inland waters and lakes and economic development of port infrastructure.

In turn, the Maritime Office of the Republic of Slovenia, as part of the Ministry of Transport and Communication located in Ljubljana, results in charge of memoranda of understanding on maritime traffic, concessions, economic and business activities in maritime areas, activities relating to investments in maritime infrastructures, ports and harbours and their infrastructure development, maritime and hydrographic activities, etc..

It supervises also the following three commercial public services in favour of marine activities:

- a) regular maintenance of port infrastructure intended for public transport;
- b) regular collection of waste from ships;
- c) regular maintenance of facilities which ensure safe navigation as well as safety of sea ways.

This kind of commercial services, in the Slovenian ports, may be carried out:

- through concessions granted to entities of private law;
- by public companies;
- in the organizational units of Ministries.

As far as port infrastructure and facilities are concerned, according to the same source, all the infrastructure and facilities that contribute to ensure safe navigation and ship's mooring, are considered by the Slovenian Maritime Code as "port infrastructure" and include: built-up shorelines, breakwaters, quays, piers, wharves, pier accesses, mooring devices, access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical and telecommunication installations, lighting and other facilities aiming at ensuring safe navigation and mooring as well as at allowing the undisturbed performance of port activities.

2.2.3 The port of Koper and the Luka Koper company (General and Historical Introduction)

The port – founded on 23rd May 1957 - is governed from the beginning by a port service Company which, in 1960, received its present name of Luka Koper.

In the years subsequent to its foundation, new infrastructure and suprastructure were built by Luka Koper with the following major turning points in the port area development:

- achievement of the status of “free-trade” zone in 1963.
- construction in 1967 of the railway connection to Kozina – in which Luka Koper d.d. was an investor – through which the port of Koper was (and still is) linked to the European Railway network and the Central-East European countries hinterland.
- construction of the container terminal (1979).
- construction of the dry bulk cargoes terminal (1984).
- construction of the grain Silo terminal (1988).
- construction of the car terminal (1996).
- construction of the livestock terminal and waste treatment facility (1998).
- construction of the parking warehouse with a 3.350 car capacity (1999).

Many other and important investments were made also in the most recent years, always by Luka Koper, with the aim of upgrading both port capacities and operational equipment.

In particular, the construction of infrastructure and storage premises at Pier II, the renovation of cranes and the purchase of forklifts and, in general, the modernization of equipment and devices for handling cargo and warehousing of goods, as well as the renovation and technological improvement of the existing operational capacities of suprastructure such as the cement silo as well as the timber terminal and relevant equipment, etc.. Since 2004 Luka Koper is engaged in an intensive activity preliminary to the beginning of the construction of the new Container Terminal at Pier III: this, also to overcome the opposition of the local community that fears heavy negative environmental consequences from the new infrastructure.

At present the port is a multipurpose structure equipped and qualified to receive and operate all the types of ships (conventional, multipurpose, container, ro-ro and ferry vessels) as well as all kinds of cargoes (general cargo, perishable goods, livestock, all kinds of solid and bulk cargoes, etc.) in 11 specialized terminal, all designed, planned, built and managed by Luka Koper either in its former capacity of 100% socially owned Company or, after the 1991 constitutional change, in its new position of private Company (as from 1993), entered in 1996 in the Koper Court Register as a joint Stock Company under the name of Luka Koper, Port and Logistic System Stock Company.

All the Terminals are located in the port area at present utilised for performing the port services (4,737,000 square metres, out of a total of 16,000,000 square metres of space available to satisfy all the additional request/needs that could arise for the further development of the port) and put at disposal of customers the following areas/infrastructure/suprastructure, premises/warehouses:

- 313.000 square meters covered warehouses, including a 3.350 car capacity warehouse;
- 966,000 square meters of open storage areas;
- 53.000 cubic meters of shore tanks;
- 81.000 ton silo capacity.

To this respect it is worth to stress that, being the development strategy of the Company aimed at further increasing competitiveness also through the transformation of the port area both into a distribution as well as in an organizer and logistic services centre (qualified to deliver/receive goods to their destination/from their origin with advanced logistic support), in the last years the Company – as indicated in its Annual Reports and confirmed by the management during the meeting had in Koper - has continuously complemented its main port activity (and still is heavily engaged in this policy) with logistic, financial, marketing and other services to increase the added value of the pure loading/unloading port operations and make them more attractive to customers.

Therefore, the 11 specialized terminals, managed as independent “profit centres”:

- General Cargo Terminal;
- Container and ro-ro Terminal;
- Car Terminal;
- Fruit Terminal;
- Timber Terminal;
- Livestock Terminal;
- Silo for grains;
- Alumina Terminal;
- Coal and Iron ore Terminal;
- Dry Bulk Cargo Terminal;
- Liquid Cargo Terminal.

are able to furnish the various kinds of goods with all basic services from handling to storage, distribution and delivery as well as with all other services aimed at improving the merchandise’s quality and at preparing it for direct selling such as sorting, marking, bagging, labelling, coding, cutting, mixing, crushing, washing, packing, etc.

2.2.4 The port of Koper’s traffic and the countries served

As a result of this upgrading, the traffic has been continuously growing particularly from 2003 as confirmed by the following table that summarizes the total port throughput for the years 2000/2004.

Table 2-25: - Koper port cargo throughput – years 2000-2004

Year	Tons handled	% difference on the previous year	% difference on 2000
2000	9.321.832	====	====
2001	9.353.991	+0,34	+0,34
2002	9.431.496	+0,83	+1,07
2003	11.036.458	+17,02	+18,39
2004	12.402.607	+12,38	+33,05

Source: Luka Koper 2004 Annual Report data – Elaboration: Marconsult.

The recent entry of Slovenia in the European Union and the foreseen realisation of both Corridor 10 Salzburg-Ljubljana-Zagreb-Belgrade-Thessaloniki (a trans-European route crossing the entire Slovenian territory) and Corridor 5 Barcelona-Lyon-Turin-Milan-Verona-Venice-Trieste/Koper-Ljubljana-Budapest-Kiev (that, in its final leg, represents the fastest way for linking North Adriatic regions with Central and Eastern Europe and may become the Slovenian transport system backbone), seems destined to make easier a further growth of the port and to pave the way towards a new important increase of the port relevance for the entire North Adriatic area with a particular view to Central and East European countries.

This very special position is confirmed by 2002 Luka Koper official data⁹ according to which, in addition to internal traffic, Koper has handled cargo originating/destined from/to the following different European markets, where Central and Eastern countries are in great majority:

- Slovenia: 37,2%
- Austria: 27,3%
- Italy: 7,2%
- Hungary: 4,9%
- Slovakia: 4,8%;
- Former Yugoslavia: 3,5%
- Czech Republic: 1,7%
- Germany: 0,5%
- Other Countries: 12,7%.

To summarize, during the last 3 years, only approximately 1/3 of the cargo handled in Koper port was destined to the internal market while the remaining 2/3 was formed by cargo in transit to/from foreign countries: Austria with a share of about 25-27%, Italy with a 7-10% then, with minor and decreasing quotas, Hungary, Slovakia, Former Yugoslavia, Czech Republic, Germany.

⁹ Even if the specific percentages come from 2002 Luka Koper Official Annual Report, the 2002 percentages' split trend has been confirmed also by the 2003 and 2004 Luka Koper Official Annual Reports.

2.2.4.1 Port governing body history

The big political changes that have characterised the former Yugoslavia have directly interested also the port of Koper and particularly Luka Koper as the port managing body practically since its origin. Therefore, to correctly understand the present status of the port vis-à-vis the public financing and charging practices, we deem it necessary to recapitulate here-below how the situation changed in the years.

2.2.5 The governing body 1960/1992: the socially owned company luka koper d.o.o.

As a result of the nationalization process fulfilled in the Federal Republic of Yugoslavia after the end of the Second World War¹⁰ and till the 1993 privatization, all the Slovenian activities, including the construction of the port of Koper, were carried out by socially owned Companies.

So when the works for the manufacture of the first part of the port were finished - and Koper, in December 1958, was able to receive the first transoceanic ship and to moor it in the first 135 metres of port operating quay - the responsibility of the port management was in the hands of the same socially owned Company in charge of the port construction that, in 1960, was named Luka Koper. Since the beginning – on the basis of what that has been possible to understand during the interview with the Company management – Luka Koper, even if operating in a socialist regime, has been indicated as acting like an independent port service Company, with the whole responsibility of port administration (including direct performance of port operations and basic services to ships and cargo) as well as of its construction, development and enlargement.

In its capacity of a Yugoslav independent body, according to the information obtained through Luka Koper Management, the Company has operated for the most important part of its investments, basically but not exclusively, through self-funding i.e., with its funds (even if of public nature), operational profits and money borrowed from the public Banking system at market conditions¹¹. As a matter of fact, in the period from 1976 till the end of the '80 years, a part of the funds was earmarkedly acquired with the co-financing from other Slovenian enterprises in the form of a particular contribution (a specificity of that time system of self-management of the social ownership). These funds were acquired by Luka Koper without any expenses and obligations of refund and, according to Luka Koper management written indications, “...their value, reached a level of approximately 20% of the value of the total assets of the Company. To-day we would call this a tax which other Companies were obliged to pay directly to Luka Koper.”

Always according to the same source, owing to the economic regime at that time existing (1957/1992) Luka Koper, as an independent socially owned Company, should have utilised, operated and managed the socially owned port land, infrastructure, suprastructure and equipment without paying any rent or other charges, since all infrastructure, suprastructure and equipment were socially owned.

¹⁰ As confirmed by Luka Koper official Reports, the nationalisation process - that brought all the private business, industry and land ownership under State control - started in Yugoslavia in 1945 and lasted up to 1992. Only in 1993, two years after the regained independence, with the Slovenian privatisation law, the previous situation was re-established: the privatization process was completed in 1996.

¹¹ According to Luka Koper management, all the funds so obtained, were regularly reimbursed on the basis of normal financial terms and procedures.

Therefore, bearing in mind either its public origin or its operating in a social economy (even though as an independent basically but not totally self-funding Company), it is impossible to consider it as pertaining to the category of “Company ports”, whose main characteristics are those of being managed by Companies acting without any financial assistance from Central Government. As a matter of fact, taking in consideration its operating free of any charge for the use of port land, this means that it was substantially receiving an indirect regular public contribution, in addition to the above mentioned form of co-financing from the other companies. However, this situation has not been considered by Luka Koper management as a form of contribution, but only as the normal consequence of the social and political regime existing at that time.

This being the situation, in the whole period, irrespective of the Company belonging to two different States, considering that the governing body was, formally, a public Company and notwithstanding its officially reconfirmed independent nature and financial partial self-sufficiency by the Company’s present management, under an institutional point of view it seems practically impossible to include the port management of Koper of that period in the category of English port Companies.

On the contrary, bearing in mind that it was taking direct responsibility:

- for port infrastructure and suprastructure planning, construction and management;
- for port development and enlargement;
- for performing all, or almost all the most relevant operations, services and activities carried out within the port area,

it can certainly be included in the group of ports acting as Comprehensive Port Authorities.

Luka Koper was indeed characterized by a strong tendency towards a complete monopoly not only in the overall management and administration of the port but also in performing ship’s and cargo handling, transshipment, storage, etc., in line with the other legal systems that emphasize the public role of the port.

2.2.6 The governing body from 1993 till now: the joint stock company Luka Koper d.d.

The Slovenian economic reforms introduced shortly after the freedom regaining, included the privatization of Luka Koper whose procedure, according to Luka Koper official Reports, started on 1st January 1993.

The country internal economic restructuring was pursued with caution and graduality: that’s why the transformation process lasted some years and was completed in November 1996.

Also after the privatisation date, the port governing body continued to be Luka Koper. However, since that moment, the Company – on the basis of the above Reports - was (and still is) managed in accordance with the Commercial Company Act (as the fundamental statutory act regulating in the Republic of Slovenia this field of activity), the articles of Association of Luka Koper d.d., as well as with the provisions of the Corporate Governance Code.

Meanwhile the abbreviated name of the privatized port service Company has become Luka Koper d.d., after its entering the Koper Court Register as a Joint Stock Company under the name of Luka Koper, Port and Logistic System Stock Company.

According to the Luka Koper d.d. 2003 and 2004 Official Annual Reports, like all the other private independent joint Stock Companies listed in the Ljubljana Stock Exchange, it is now operating on the basis of the criteria that guide management in the private sector i.e., with priority approach to shareholders profit which has become the Company general philosophy and which has allowed the Company to be at present considered as one of the most important economic entities of the entire country.

Therefore even if, formally, also after the conclusion of the privatization process the port governing body remained the same Company as before, substantially Luka Koper had to completely shift its mentality from the pursuit of the social interest to the attainment of the highest possible shareholders' profit.

Accordingly, also the port and traffic management had to be carried out exclusively under this new business perspective and all activities had to be guided by the most advanced and sophisticated managerial criteria to maintain to the Company the Stock Exchange highest appreciation level that has meanwhile attained.

As far as the institutional aspects are concerned, after this management philosophy overturning, the port of Koper situation seems much more clear than in the previous period. As a matter of facts, in its present set-up, Luka Koper exactly represents a case of a port management body with legal and economic independent existence, acting in the exclusive shareholders' interest, that fully operates as a private enterprise.

In other words Luka Koper – that substantially continues to act as a Comprehensive Port Authority – under an institutional point of view seems to be now in an intermediate position between that of the British-style port authorities (whose tasks do not rely on the concept of port activity as a public service but on that of the management of all ports activities as private firms) and that of an autonomous body managing a public port as independent Company with legal and economic existence and acting like all the private Companies registered in the Ljubljana Stock Exchange.

This also because, it seems very difficult to agree with Luka Koper Deputy Chief Executive statement that, even with the shareholders majority controlled by public interests (the Slovenian State and Koper Municipality), the Company:

- should now be performing its activity without any form of guidance, assistance or positive influence from Central Government or other public bodies;
- should not benefit from any special treatment or particular contribution, attention or consideration either from the State or from any other public entity,

apart from the strategic guidelines on national port policy from the Ministry of Transports.

As a matter of fact and even if the above mentioned statement could be considered formally acceptable, substantially it seems unrealistic to exclude, in practice, any form of indirect assistance or positive influence from Government majority participation, taking into account the considerable public presence in the Supervisory Board and both the objective overall meaning as well as the big political weight that this presence most probably exerts in the Company daily activity, at least, under the point of view of the better general consideration

and of the increased trustworthiness of the Company not only in the economic and financial matters in which it could be operatively involved.

Coming back to its sep-up of Joint Stock Company, also Luka Koper d.d., like all the other Companies listed on the Stock Exchange, owns now a Company's capital divided in shares, whose symbol at the Ljubljana Stock Exchange, is LKPG. On the basis of the indications contained in the Luka Koper d.d. 2004 Official Annual Report, share capital results divided into 14.000.000 shares of which 7.140.000 are ordinary registered shares traded in the Ljubljana Stock Exchange. The remaining 6.860.000 (corresponding to the 49% of the entire capital) are participating preference shares, with fixed and variable portions of return and limited voting rights. Nominal value of both classes shares is indicated in 1000 SIT (Slovenian Tollers¹²) per share.

As far as the shareholders are concerned, the Republic of Slovenia, with a 51% participating interest ¹³(49% preference shares, 2% ordinary registered shares), is the largest owner. Other important partners are the Municipality of Koper, some Investment Companies, Mutual Funds, Banks, Brokerage Companies, and other shareholders. Single shareholders (individual persons), according to Luka Koper web site, at the end of December 2002 were holding the 13,50% participation while, according to Luka Koper d.d. 2004 Official Annual Report, at the end of same year, the shareholders were, in total, 9,813, i.e. 15,38% more than in 2003. On December 2004 the 10 largest shareholders held 76,32% of all Luka Koper shares.

The same official documents report that 2003 has been a very positive year for Luka Koper d.d. whose shares' value rose 60,25% from the beginning of the year, while during 2004 the share value rose another 11,7%. Their 2003 uniform price on the last day of trading was of SIT 7,217.57 against their first day of trading price of SIT 4,503.91 and their nominal value of 1,000 SIT with the 2003 share's average price of SIT 5,290.79 equal to a 24% increase on 2002 when the gross dividend per ordinary share was SIT 225. In 2003 it reached SIT 245 per ordinary share and SIT 65.86 per preference shares: this same level is foreseen for 2004. That's why, according to the above mentioned document, "in 2003 the LKPG shares attained the highest growth value on the Ljubljana Stock Exchange." This positive trend was confirmed also for 2004 when Luka Koper shares uniform price on the first day of trading was SIT 7,201,99 and on the last day SIT 8,047,33.

Of course, also for Luka Koper d.d., the holders of all classes of shares as well as their representatives, the members of the Management Board and of the Supervisory Board are entitled to attend to the general meetings of the Company. The holders of ordinary shares and their representatives have voting rights on all matters regarding the Company while the holders of preference shares and their representatives have voting rights only in the cases specified in the articles of Association of the Company.

¹² According to the Italian economic newspaper "24 Ore-II Sole" of July 20th, the average 2004 value of the Slovenian Toller (SIT) has varied between SIT 240,4 and 239,4 per 1 Euro and on July 20th it was indicated by BCE in SIT 239,5 per 1 Euro.

¹³ However, should the decree adopted in October 2003 by the Government of Slovenia for the sale in the subsequent two years of its 26% shares in Luka Koper d.d. be effectively enforced, its participation, in this case, should drop from 51% to 25% even though it should continue to remain the highest one.

2.2.7 The governing body: Luka Koper's d.d. present organizational structure.

On the basis of the Official Reports, Luka Koper. d.d.- characterised by a one-member Management Board, the Chief Executive Officer - is managed in accordance with the Commercial Companies Act as well as with the Articles of Association of Luka Koper d.d..

The Management Board (the Chief Executive Officer), is appointed by the Supervisory Board for a period of five years, with the possibility of re-election. Since the Company's transformation conclusion into a Stock Company in 1996, the Chief Executive Officer is the same, having been re-confirmed in 2001 after the first 5 years period. The powers of the Management Board are set forth in the Company's Articles of Association.

The Management Board is responsible for the Company's management. The Company's Management Board – the Chief Executive Officer - is assisted in his activities by a Deputy Chief Executive Officer, a Management Team (selected and appointed by the Chief Executive Officer and approved by the Supervisory Board) and by the Directors of the Terminals, who are responsible for the management and business operations of the various terminals which are handled as profit centres. Also the Directors of the Terminals are appointed by the Chief Executive Officer.

The Supervisory Board – *the **Company's highest level body** whose main task is to continuously monitor Luka Koper management and operations and to watch the standing of the Company and its subsidiaries as well as their operations and operating and overall results* - is composed by nine members: three are proposed by the Republic of Slovenia¹⁴, three are elected by the Employee Council and the remaining three are proposed one by the Municipal council of Koper, one by the Funds of the Republic of Slovenia and the last one by the other shareholders.

2.2.8 The governing body: Luka Koper d.d. last activity's results

According to Luka Koper official papers, in the years 2000/2004, traffic volumes (see Table 2-26) rose from 8,3 million tons of 2000 to almost 12,5 million tons of 2004. Of course, this brought also to a parallel improvement in operating revenues. In the same period, operating costs too showed a relevant grow. In particular in 2001 and 2002, owing to poorer utilization of fixed assets as well as to the increased revaluatory expenses, operating costs greatly exceeded operating revenues. However the operating losses were more than compensated by relevant financial revenues. The overall 5 years profit and loss statement is shown in Table 2-27 which contains the most meaningful figures of Luka Koper balance results expressed in thousand of SIT and shows, for all the five years, a final profit with however an important difference between 2001/2002 and 2000, 2003 and 2004. As a matter of facts, the final positive balance in 2001 and 2002 was the result of the combination of high operating costs with very important positive financial revenues (which not only have compensated the operating losses but have also left a positive margin), while the positive results of 2004, 2003 and 2000 derived from the combination of two positive factors: the operating profits and the financial positive results.

¹⁴ That's why, as underlined in the previous paragraph, it seems very difficult to exclude any form of influence end/or of political pressure notwithstanding the statements on the contrary made by Luka Koper management.

Table 2-26: Koper port cargo throughput – years 2000-2004

Year	Tons handled	% difference on the previous year	% difference on 2000
2000	9.321.832	====	====
2001	9.353.991	+0,34	+0,34
2002	9.431.496	+0,83	+1,07
2003	11.036.458	+17,02	+18,39
2004	12.402.607	+12,38	+33,05

Source: Luka Koper 2003 Annual Report and Luka Koper Web-site– Elaboration: Marconsult.

2.2.9 The governing body: Luka Koper d.d. and its subsidiaries and associated companies

As outlined in paragraph 3, the port is now a multi-purpose structure equipped and qualified to handle practically all cargoes, receive all types of ships and serve all the modes of transport.

However, being the Company's development strategy aimed at further increasing competitiveness also by transforming the port area either in an organizer and logistic services centre qualified to deliver goods to their destination with advanced logistic support or into a distribution centre (where the customers may select and purchase goods), in these last years the Company is complementing its main port activity with marketing, logistic, financial and other services aimed at increasing the added value of the simple loading/unloading port operation and at making them more attractive to the customers. This Company's policy has been confirmed also for the next years.

Therefore, the 11 specialized terminals, either directly or through skilled subsidiary/associated Companies, are capable to furnish the various kinds of goods with all basic services from handling to storage, distribution and delivery as well as with all other services aimed at improving the merchandise's quality and at preparing it for direct selling, such as sorting, marking, bagging, labelling, coding, cutting, mixing, crushing, washing, packing, etc..

To attain these goals Luka Koper has created in the most recent years an integrated logistic chain, the Luka Koper Group and it is now able to offer a complete logistic service to many of the most important types of cargo and particularly to those originating/destined outside the Slovenian borders and particularly in the Central Eastern European countries.

The Group is now formed by Luka Koper itself and by the following Subsidiary Companies and Associated Companies.

2.2.9.1 Subsidiary companies

The Subsidiary Companies resulting from the 2004 Luka Koper Annual Report are the following five:

Luka Koper Pristan d.o.o. (controlled by 100%). The Company is reported as skilled in hotel, hospitality and accommodation services.

Luke Koper Inpo d.o.o. (controlled by 100%). Since 1996, this subsidiary – with the status of disablement Company – is indicated as operating in the maintenance and services sectors, including mooring and unmooring as well as in collection of truck terminal rates and in waste collection from ships.

Logistic Service d.o.o. (controlled by 100%): it is reported as a dormant Company, created for container transporting. At present, has not yet carried out any operation.

Luka Koper Beograd d.o.o. (90% shares' ownership). Also this subsidiary is qualified as a dormant Company, established to strengthen Luka Koper d.d. position in Serbia and Montenegro markets.

Adria-Tow d.o.o. (50% shares' ownership), with basic activity the performance of ships' towing services. Other activities indicated are ships' supplies as well as rescue and assistance to ships at sea.

2.2.9.2 Associated companies

The Associated Companies resulting from the 2004 Luka Koper Annual Report are the following seven:

Adria Transport d.o.o. (50% shares' ownership). The Company has been established in 2004 jointly with the Austrian Company Graz-Köflacher Bahn und Busbetrieb. It will be engaged in the organization and performance of rail transport activities.

Autoservice, d.o.o., Koper (49% shares' ownership); it is employed for various interventions in connection with cars terminal operations (minor repairs, de-waxing, etc.);

Adriafin, d.o.o., Koper (39% shares' ownership);

Actual I.T., d.o.o., Koper (26% shares' ownership);

Kopinvest Netherlands B.V. d.o.o., Koper (25% shares' ownership);

Intereuropa d.d., (23% shares' ownership);

Golf Istra d.o.o. (20% shares' ownership).

During 2004, the following participations were sold:

- 49% ownership in the "Trieste International Container Terminal", T.I.C.T. S.p.a., Trieste;
- 50% ownership in Adria Distripark S.r.l., Trieste;
- 39% ownership in Finor, d.o.o.;
- 33,33% ownership in W.E.S. d.o.o..

By relying on this integrated operating structure, in addition to the traditional cargo handling directly performed at the various Terminal, Luka Koper is thus able to offer logistic operations/services as well as to furnish ships with towing service, garbage collection and mooring and unmooring operations.

In particular, the last two services:

- garbage collection
- mooring and unmooring operations,

are provided through Luka Koper Inpo d.o.o., while towing assistance is performed by the Subsidiary Company Adria-Tow d.o.o.,.

As it clearly appears from the foregoing, the only Technical-nautical service that is not directly provided to ships by Luka Koper Group is Pilotage.

This service is carried out by a self-employed organisation, the “Piloti Koper”, whose members are registered in the Pilot’s Register at the Slovenian Maritime Directorate (on the point, see paragraphs 2 and point ‘tariff for pilotage of vessels’).

2.2.9.3 Luka Koper d.d and its relationship with slovenian central authorities

As already stressed in paragraphs 5 and 6, although in the new situation the port managing body formally remained the same Company as at the beginning, substantially both its purpose and legal status completely changed in the two periods with great diversities not only in the institutional framework but also in the basic management policy.

2.2.10 The situation during the years 1957/1992

In the period 1957/1992, practically all the infrastructure were planned, decided, managed and basically (but not exclusively¹⁵) financed by Luka Koper acting as a socially owned Company that, formally, was operating as an independent entity within the framework of the social economy.

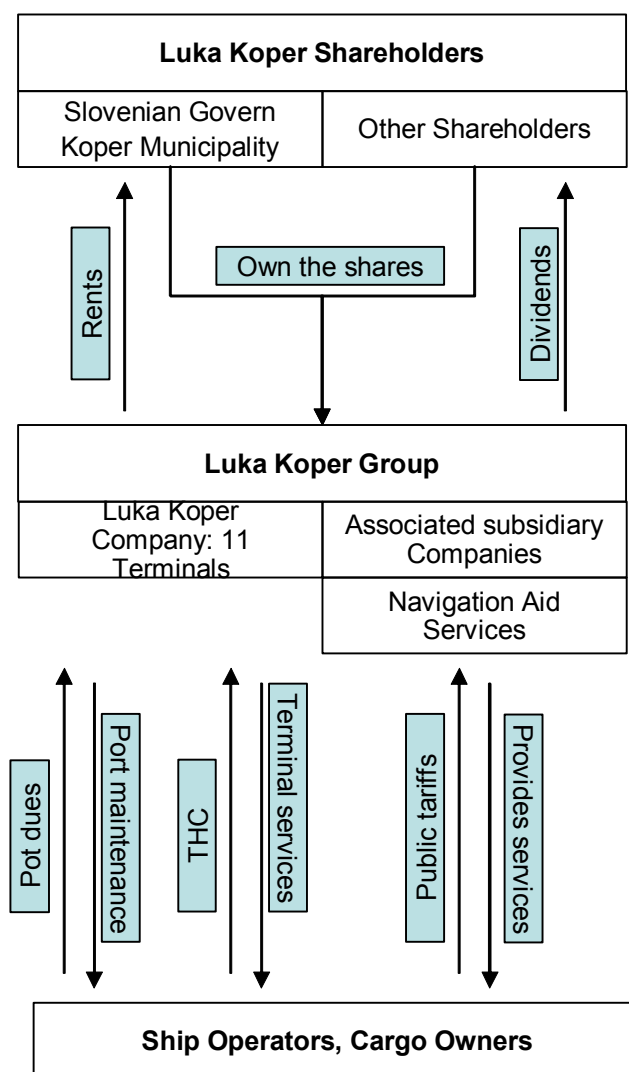
Therefore, as already pointed out, all port’s matters, activities and operations were primarily considered as public service to be carried out in the public’s interest but always to get the best positive results for the Company and the community to which it was pertaining.

2.2.11 The situation as from 1993

With the privatization, the situation has been completely changed. This big change has involved also Luka Koper relationship with Slovenian Central Authorities and, as a consequence thereof, the port of Koper **Governance Structure**, at present, on the basis of the laws and other regulations and agreements at the moment in force, and of the information obtained during the visit paid in Koper, results that one shown in the following Figure.

¹⁵ See paragraph 5

Governance structure of the Port of Koper



To complete the picture of the official Slovenian documents (laws, regulations, agreements, etc.) and of the information gathered on the matter, we sum up here-below those that seem the most interesting ones for the purpose of our Study.

2.2.11.1 The february 2000 lease agreement

As it results from the 2002, 2003 and 2004 Luka Koper Official Annual Reports, since the year 2000 - and still at present - the relationship between Luka Koper and the Republic of Slovenia continue to be “temporarily” regulated by the *lease agreement* dated February 2000. The document covers the utilisation of operating quays and land owned by the Republic of Slovenia in the port of Koper and, according to it, Luka Koper – which is entitled to invest in the leased property – must pay the Ministry of Transports and Communication an annual rent of SIT 20 (equal to €. 0,0834) per ton of cargo handled, with the exclusion of petroleum products.

The payment of this annual rent has been confirmed also during our recent interview with Luka Koper Management. In that occasion it was specified that, in addition to that charge,

Luka Koper must also pay an annual rent to Koper Municipality in the amount to €. 1,45 per square meter of port land.

2.2.11.2 The maritime code 2002 and the decree 14th december 2002

Always according to the above mentioned Luka Koper Annual Reports, the matter dealt with by the agreement has been treated also by the Maritime Code of may 12th 2002 which provides a 6 months period from the entry into force of the regulation referred to in art. 39, for the settlement of the business relations between the Republic of Slovenia and Luka Koper.

Further on, these problems have been considered also by the Government with the Decree on the Awarding of Concessions for the Management, Development and Regular Maintenance of Port Infrastructure in the cargo port of Koper, which came into force on 14th December 2002.

That Decree, while confirming that the port of Koper is owned by the Republic of Slovenia, defers the definition in more details of both port infrastructure purpose and their ownership to the concession agreement. The Decree, which is the basis for the settlement of the relationship between the two parties, states also that, before signing the concession agreement for the usage of existing infrastructure (the present one is lasting 35 years, starting from 2003) the grantor (the Republic of Slovenia) and the licensee (Luka Koper), *must define their positions by signing:*

- an agreement regulating their mutual relations for the period following the ownership transformation of the former socially-owned public Company Luka Koper p.o. in the Luka-Koper d.d. listed on the Ljubljana Stock Exchange;
- a special agreement regulating land usage rights, land development and other issues concerning the land in the port of Koper owned, as already said, by the Republic of Slovenia.

2.2.12 The problems still open between the two parties

Summarizing, on the basis of the above mentioned Reports, before concluding the concession agreement in favour of Luka Koper d.d. for the usage of existing infrastructure, the Decree asks the two parties on one hand to regulate in all economic details the problem of ownership of shorelines/quays/other infrastructure built on the land of the Republic of Slovenia by Luka Koper d.d. after 1st January 1993: a very delicate matter, particularly for those works whose depreciation, at the end of the concession period, could not be completed, for the case that, at the end of the period, as a result of a public auction, the concession should not be renewed to Luka Koper.

Another very big question concerns ways and means to be agreed upon by the two parties to reimburse Luka Koper for the money it is spending for port new infrastructure construction, starting from that one of Pier III now in progress, since the new pier will be assigned in concession on the basis of an international auction, whose winner could be a third subject different from Luka Koper.

On the whole matter, it does not seem so easy to reach an acceptable agreement owing to some important differences in the two parties' positions. On the basis of Luka Koper

management written information only for the land utilisation”” *the State requires from 4 to 8 times higher leasing rate*””¹⁶

According to both ESPO Report and 2003 and 2004 Luka Koper Official Annual Reports, the Company has already prepared and presented the drafts of the three papers requested by law to settle the whole matter. At the time of writing this Report, no agreement has yet been reached with the Republic of Slovenia, as confirmed by Luka Koper management during our visit of 18/05/05.

Therefore, the relationship between the two parties for utilisation by Luka Koper of port infrastructure, operational facilities and port land, at present continues to be contractually regulated by the lease agreement concluded in 2000 that concerns either the operational port infrastructure, facilities and suprastructure or the land owned by the Republic of Slovenia in the port of Koper.

2.2.13 The temporary settlement of the relationships

In connection with the foregoing, always on the basis of the information contained in the above Reports and of those directly obtained in Koper, according to the clauses of the 2000 lease agreement still in force, *Luka Koper d.d results having regularly paid to the Slovenian State the foreseen annual rent of SIT 20 (equal to € 0,0834) per ton on all kinds of goods handled in the port, with the exception of petroleum. In addition to the above mentioned rent, according to Luka Koper management, the Company results having regularly paid a further rent for the port land to the Koper Municipality in the amount of € 1,45 per square meter of port land.*

While waiting for a permanent settlement of its relationship with Republic of Slovenia, Luka Koper d.d. has started modifying its internal structure to adapt it to the foreseen probable changes by adding to its organizational structure a *port infrastructure service*.

The lease agreement 2000 has another important meaning under the aspect of seaport public financing system, because it represents an indirect clear confirmation that Luka Koper:

- from 1957 till 1999, has not paid any rent to the State for the use of port land, infrastructure and structure which were utilised free of any charges.
- only, as from 2000, is paying an annual rent.¹⁷

Always with regard to these relationship's aspects, it is worth to remind that, according to the Luka Koper 2003 and 2004 Annual Reports as well as to the ESPO Report, Slovenian Maritime Code qualifies as port infrastructures all infrastructure and facilities which contribute to ensure both safe navigation and mooring as well as for the undisturbed performance of port activities. This means that for the Slovenian Maritime Code, the term “**port infrastructures**” has a broader meaning in comparison to that adopted for this Study since, as per paragraph 2, it includes *built-up shorelines, breakwaters, quays, piers, wharves, pier accesses, mooring devices, access routes, railway tracks, entrance gates, fences, sewage*

¹⁶ This too seems an indirect confirmation that the present very low level of the leasing rate could represent a form of indirect financing.

¹⁷ Taking into account the very low level of the rent, the same could probably represent an indirect form of port financing, since it is one of the sources of the positive operational results obtained by Luka Koper through its 11 terminals.

and water systems, electrical installations, lighting and other facilities aiming at ensuring safe navigation and mooring.

According to Luka Koper 2004 Annual Report¹⁸, “Port infrastructure is the property of the Republic of Slovenia and the local Community or entities of private law¹⁹. The Republic of Slovenia or the local community grant a concession for the management, control and development of port infrastructure to the authority managing the port.” In Koper – even if without any official appointment - this authority is at present Luka Koper, which operates on the basis of a 35 years concession, as already specified in paragraph 11.

Furthermore, with particular reference to the port of Koper, according to Luka Koper 2004 Annual Report, public moneys spent there in access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical installations, lighting and telecommunication installations “” represent an investment of the Republic of Slovenia’s property in the share capital of Luka Koper d.d.²⁰”. The mentioned document adds that, as long as the same is used for the purpose for which it serves, it cannot be part of the bankruptcy estate. Always on the basis of the same Report, *Luka Koper d.d. is responsible and obliged to carry out the regular maintenance interventions* necessary to preserve all the basic functions of these facilities as part of the port infrastructure, with the funds cashed as Port Dues. To this purpose, according to the Deputy Chief Executive Officer, Luka Koper – that now carries out the port works through the just established Port Infrastructure Dept. - in the last 10 years has spent €. 70 millions as port maintenance. These costs are borne by Luka Koper and are then reimbursed by the State through the Port Dues: when Port Dues exceed the costs, Luka Koper must give back the difference to the Ministry. If Dues are not enough, the difference is anticipated by Luka Koper and recovered the following year from the amounts so levied. This means that Koper port maintenance costs - advanced by Luka Koper and then reimbursed by the Ministry of Transports – are really paid through public funds: the Port Dues. Coming back to the lease agreement concluded in 2000, it must be noted that, according to the mentioned Reports, it allows the licensee to invest in the leased property and that, in compliance with the provisions thereof, in 2003 Luka Koper d.d invested SIT 146,065,000 for the maintenance of the operational shores/shorelines/quays of the port land; furthermore an additional sum of SIT 983,047,000 was destined to the maintenance and management of port infrastructure, on the basis of the Maritime Code and of the Decree on the Awarding of Concessions or the Management, Development and Regular Maintenance of Port Infrastructure in the cargo port of Koper. On the point, according to the 2003 Official Report, for port maintenance Luka Koper spent SIT 1,109,112,000 while, as Port Dues²¹, it cashed only SIT 1,035,565,000, with maintenance costs exceeding Port Dues for SIT 73,547,000 and with that difference to be recovered by Luka Koper from the Port Dues collected during the following year. In the same year 2003, Luka Koper started the works for the new Coal & Iron Ore Pier, to improve working conditions of Dry Bulk Cargoes terminal and spent SIT 557,697,000 out of the total investment value of about 1,2 billion SIT. Additional investments regarded the construction of Pier II infrastructure, the enlargement of rail capacity and other interventions in port infrastructure.

¹⁸ Luka Koper 2004 Annual Report, page 50.

¹⁹ This is the case of the suprastructure built after 1993 by Luka Koper, that it is now an entity of private law.

²⁰ Luka Koper 2004 Annual Report, page 50. In the same sense are also the 2002 and 2003 Luka Koper Annual Reports as well as the ESPO Report.

²¹ Considering the overall cargo handled by the port in the same year (ton 11,036,457) this means SIT 93,81 (equal to €. 0,3908) per ton handled.

During 2004, according to the 2004 Annual Report, “investments amounted to SIT 6,200,000,000 (or € 26,100,000), which represents a 36% increase in comparison to the previous year.²²” The investments regarded either amelioration on terminal areas/warehouses (timber terminal, cars terminal coal, etc.), or new operating equipment (a rubber tired gantry crane and a reach stacker).

2.2.14 WP1: public financing of seaports in Slovenia

2.2.14.1 Task Ia: identification of system for public financing of seaports in Slovenia

In the Forward of this Study it is clearly indicated that the data related to Koper and Luka Koper may be considered the basic information for the Slovenian situation, bearing in mind that the only Slovenian port able to handle international cargo is Koper, whose managing body is Luka Koper.

Furthermore, for the purpose of this Report, it seems useful to remember that “Port Infrastructure” as defined by the Slovenian Maritime Code ²³ includes not only the port infrastructure but also the so called “special infrastructure” or “terminal related infrastructure”.

“Port suprastructure” is not officially defined but, by elimination, it should comprise all mobile and immobile equipment that is upside the land area.

2.2.14.2 Task I b: public financing in the port of Koper

The port of Koper situation with regard to the works carried out, as well as to the nature of the Company managing it, has been clearly illustrated in par. 5 and 6.

To this purpose is it however interesting to note that:

a) for the years 1957/1992 the Company is practically considering an usual procedure its exemption from any rent payment as well as some co-financing from other Slovenian enterprises, as better indicated in paragraph 5, i.e. two forms of interventions that, according to our opinion, could clearly represent a indirect public support.

b) has summarised as follows the situation created by the privatisation law passed in 1993 by the Slovenian Parliament:

- all port lands as well as all port infrastructure (built-up shorelines, breakwaters, quays, piers, wharves, etc.) and suprastructure (sheltered and open storage areas, roofed and special warehouses, shore cranes, other handling equipment, etc.) built/bought by Luka Koper with its public funds during the period when port was socially owned property, are now Slovenian State property;

²² 2004 Luka Koper Annual Report, page 32.

²³ As better specified in par. 2, according to the few sources available, the Code defines as follows port infrastructure: built-up shorelines, breakwaters, quays, piers, wharves, pier accesses, mooring devices, access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical installations, lighting and other facilities aiming at ensuring safe navigation and mooring.

- all port lands (except a small part beside the old town which is owned by Koper Municipality) as well as all port infrastructure built after 1993 by Luka Koper with its funds, have become too Slovenian State property;
- all other port infrastructure such as access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical and communication installations, lighting and other facilities, belong to the Slovenian State. They have been considered by the State as its investment in Luka Koper d.d. and represent the 51% of Luka Koper share capital.

On the above mentioned topics, the same officer either verbally or through subsequent written clarifications, has summarised as follows the expected final Luka Koper position:

- utilisation of port infrastructure and suprastructure built before 1993 as well as of infrastructure built after 1993 through a 35 years concession;
- utilisation of all other port infrastructure such as access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical and communication installations, lighting and other facilities, through the same 35 years concession
- recognition of Luka Koper property for all port suprastructures built after 1993.

In other words, all ports infrastructure and suprastructure built up to 1992 by Luka Koper with its funds (at that time, public funds), as well as all port infrastructure built after 1993, *are now exclusive property of the Republic of Slovenia*.

On the point, the same source has confirmed that concessions to licensee for port infrastructure's management and development are granted by the Maritime Office of the Republic of Slovenia²⁴

Licensees and concessionaries' rents, fees, obligations and rights related to port infrastructure utilisation and administration and waste collection from ships, are dealt with by the Maritime Office of the Ministry of Transports and Communications and are set by Government Decree.

Ports are administered by concessionaries on the basis of annual, middle or long terms activity's plans presented to the Government for approval only for the strategic matters involving national maritime policy. These plans are supervised by the Maritime Office of the Republic of Slovenia.

Summarising, the following infrastructure are now Slovenian State property:

- the Koper port primary or basic infrastructure as well as the terminal related infrastructure (such as piers, gates, adjacent areas/lands) for the part built or acquired before the privatisation process completion;
- the other basic or secondary infrastructure (such as roads, rails, fences, power, telecommunications, water and waste waters installations, etc.) built or acquired before 1st January 1993;
- all port infrastructure built after 1993.

²⁴ For better details on this topic, please refer to paragraph 2.

While waiting for the complete settlement of the matter, the rent paid by Luka Koper to the Slovenian Government for the utilisation of the above port infrastructure/suprastructure (SIT 20 or approx. €. 0,0834 per ton of cargo handled, with the exclusion of petroleum products), amounted respectively to SIT 151,016,320 in 2002, to SIT 184,932,700 in 2003 and to about 212,052,140 Sit in 2004²⁵ or €. 884,660 in 2004. In addition, Luka Koper has also paid the relevant maintenance costs²⁶.

Taking into account the port overall throughput (including petroleum), this means a lease rate of SIT 16,01 per ton (equal to approximately €. 0,066) in 2002, of SIT 16,76 per ton in 2003 (equal to approximately €. 0.070) and of SIT 17,10 in 2004 (equal to approximately €. 0,072).

For the utilisation of all other port infrastructure (access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical and communication installations, lighting etc.), nothing has been/will be paid by Luka Koper that is, however, obliged to maintain its basic functions and to bear the relevant maintenance costs.

A quick glance to the whole picture – which shows *a very low level of lease rates* applied to Luka Koper for port infrastructure (as well as the absence of any rent fee for the other port infrastructure) - *seems, to some extent, evidence an indirect form of public port financing from the State.*

Also the annual rent paid by Luka Koper to Koper Municipality (€ 1,45 per square meter of port land, equal to €. 3,5 million during 2004 or € 0,282 per ton on the 2004 port overall throughput), seems to be on the very low side, *and could too represent another indirect form of public financing from the local administrative authority.*

To this purpose, it seems important to remind also that, according to Luka Koper 2003 and 2004 Annual Reports as well as to ESPO Report, public money spent by Republic of Slovenia in access routes, railway tracks, entrance gates, fences, sewage and water systems, electrical installations, lighting and telecommunication installations, with the 51% capital value contribution, “represent an investment of the Republic of Slovenia in the share capital of Luka Koper d.d.” and the reference basis of the 35 years concession’s rights in the port, in favour of the same Luka Koper Company.

The way and means of evaluating these investment might probably represent another Government financing in the form of indirect provision of capital, considering the very low evaluation of the money spent for all works that represent the 51% of capital value.

As far as operational management and legal provisions are concerned, both from official documents and from the contacts we had with Luka Koper management, we did not find any special provisions or particular data which could be classified as public financing. However, even though to a specific question on this topic, the reply from Luka Koper representative has been a firm confirmation of the absolute autonomy and of the complete absence of any support or contribution, some doubts remain on the matter. This bearing in mind, for example,

²⁵ Since the overall throughput of the port was ton 9,431,497 in 2002, ton 11,036,457 in 2003, and ton 12,402,607 in 2004, the non petroleum cargo ton on which the annual rent has been charged amounted respectively to 7,550,816 ton in 2002, to 9,246,625 ton in 2003 and to about 10,602,607 ton in 2004 (which means that, of the total cargo handled by the port, the rent has been charged respectively on the 80,06% in 2002, on the 83,78% in 2003 and approximately on the 85,49% in 2004). Considering the overall throughput of the port, this should have meant a lease rate of SIT 16,01 per ton (equal to approximately €. 0,066) in 2002, of SIT 16,76 (equal to approximately €. 0.070) in 2003, and of SIT 17,10 (equal to approximately €. 0,072) in 2004.

²⁶ On this point, please refer also to paragraph13 of Forward.

that Luka Koper from 1957 till 1999 has not paid any rent for the use of the ports and of its infrastructure and that, as from 2000, is paying only very low rents.

Only to complete the picture of the financial flows, it must be noted that, according to the indications furnished by Luka Koper Deputy Chief Executive, both the Slovenian Government and the Koper Municipality, in addition to the annual rents they are getting (in 2004, € 884,660 the Government and € 3,500.000 Koper Municipality), as Luka Koper Company's shareholders they are also benefiting from the Company's management profits amounting in 2004, respectively to about € 2,200,000.00 for the Government and to € 950,000.00 for the Koper Municipality.

In conclusion, on the basis of Luka Koper management statements, not only the Company should not have received/is not receiving any specific form of contribution or of particular attention from the public side²⁷, but in these last years, it should have regularly contributed with million of Euro to the Government and Municipal treasuries.

2.2.15 WP2: charging practices of seaports in slovenia

Once again, it is here confirmed that the Slovenian situation is represented by that one of Koper. So the data related to Koper and Luka Koper are to be considered as the basic information for the Republic of Slovenia for the same reasons as previously specified.

2.2.15.1 Task II a : charging practices related to port operators

The topic of the "Slovenian charging practices to Terminal Operators", has been tackled with in more details, in paragraphs 11 and 13, where the present Slovenian situation vis-à-vis the "charging practice to terminal operators" has been analysed.

Also the Koper situation, has been dealt with, in more details, in the previous paragraphs. Here we only remind that Luka Koper d.d., even without any official appointment as a Port Authority:

- practically operates since the beginning like a Comprehensive Port Authority,
- in this position, it is responsible for port administration, planning and development as well as for carrying out, after their approval, the various projects presented to the competent Ministry.

At the same time, it acts as the only terminal operator of the port of Koper where it carries out all terminal activities/services on the basis of the mentioned long-term concession and for which, according to Luka Koper Deputy Executive Officer, it is now paying **only** the two above mentioned yearly rents (SIT 20 per ton of cargo handled to the Ministry of Transports and Communication and € 1,45 per square meter of port land to the Koper Municipality) and it is bearing the maintenance costs of all ports infrastructure/superstructure utilised²⁸.

²⁷ On this point, no reference at all has been made to the management and utilisation of the port free of any rent payment up to 1992 and to the very low rent rates paid to the same purpose as from 1993, two special elements that, on the contrary, according to our opinion, must be reminded to have an actual and complete picture of the existing situation.

²⁸ On this topic, please refer also to Forward, paragraph 13.

2.2.15.2 Task II b : charging practices related to ship operators

As Terminal operator, Luka Koper, according to the information obtained:

- is charging and cashing the “Port Dues” or “Wharfage Charges” to ship’s owners/agents in the amounts foreseen per type of cargo/passengers by the Official Tariffs that are determined by the Maritime Code of the Republic of Slovenia;
- applies the official “ad hoc” public Tariffs foreseen for the principal operations/services it carries out in the port of Koper directly or through its subsidiary/associated companies.

The “Port Dues”, charged and cashed by Luka Koper on behalf of the Transport Ministry, cover the use of the port infrastructure and are utilised to face the port maintenance costs²⁹.

The Tariffs applied for the various port operations/services – which are public - are prepared by Luka Koper and become official only after the Ministry approval. According to the statements of Luka Koper representative, they are based on the principles of market economy to get the best possible compensation for the services/operations rendered, however always bearing in mind the opportunity of keeping them on the maximum level of competitiveness vis-à-vis those of the other most important North Adriatic and Northern European ports. For cases/operations not specifically foreseen, tariffs must be agreed upon between the interested parties.

According to the indications of Luka Koper web-site, as well as on the basis of the information got from the Company’s management, the most important tariffs at present in force are those listed here-below.

Tariff of Port Dues. This Tariff includes “Port Dues” and “Wharfage Charges”. It is determined by the Slovenian Maritime Code for the use of the piers and of the other port infrastructure and covers the port maintenance expenses which, according to the same Code, formally fall under the responsibility and obligation of Luka Koper³⁰, even though substantially they are then reimbursed by the Ministry of Transports through the Port Dues applied and cashed by the same Company. Consequently, all types of maintenance costs of the port of Koper are covered by public funds.

- Port Dues. These dues are paid by each vessel calling at Koper and are established both for cargo and passenger traffic operated in the port. With regard to cargo, these dues, whose amount varies according to the type of traffic handled, are applied per ton loaded and/or discharged. On passenger movements, they are charged in a fixed amount per passenger embarked/disembarked. Their amount is established by the Ministry on Luka Koper proposal and may be changed when they do not cover the normal maintenance costs. However, any kind of increase is generally kept on limited levels in order to preserve, as much as possible, the port competitiveness.
- Wharfage Charges. They are to be paid by each vessel when using the piers or port waterways for any other purpose except for embarkation/debarkation of passengers or for cargo loading and/or discharging operations.

²⁹ See par. 13, for more details.

³⁰ See paragraph 13, for more details.

Tariff for cargo handling, storage and additional services. This tariff, issued by Luka Koper, covers cargo operations and defines the prices and the operating conditions for the various services provided by Luka Koper in its 11 Terminals. The tariff, prepared by Luka Koper on the basis of market conditions as indicated by Company's management, is then sent and discussed with the Ministry of Transports and Communication. It becomes public and applicable only after the Ministry approval.

Tariff for pilotage of vessels. This tariff, issued by Koper Pilots – Sea pilotage Ltd. – a private Company that is not part of the Luka Koper Group - is based on the Maritime Code. It indicates the tariffs as well as the method of price formation for ship's pilotage services and contains the rules to be applied in the various operational situations. This Tariff must be approved by the Maritime Directorate before becoming public and applicable. Pilotage is compulsory for ships of 500 GT and more and for ships carrying dangerous cargo irrespective of their GT. In theory, Koper Pilots do not work in monopoly regime. However the conditions to operate such a service are so heavy that, practically, they are the only Company at present working in the port. As in other ports, under certain special conditions for ships and masters and on a case by case basis, ships may be exempted from pilotage by Maritime Directorate.

Tariff for towage of vessels. This tariff, issued by Adria-Tow d.o.o. – a Subsidiary Company of Luka Koper d.d.- contains the rates and conditions applicable for vessels towage as well as for ship's supplies, rescue and assistance at sea. Also for towage – that is not compulsory - no official exclusive right is granted even if, at present, only Adria Tow is operating. This Tariff too must be approved by the Ministry before becoming applicable.

Tariff for mooring and unmooring of ships. This tariff is issued by Luka Koper Inpo d.o.o., a Subsidiary Company of Luka Koper d.d., after having been approved by the Ministry. It contains the rates and conditions applicable for vessels mooring, unmooring and shifting in the port of Koper.

Tariff for Service of collection of waste from ships. The tariff is issued on the basis of the Decision of the Slovenian Maritime Directorate No. 26232-17/2004/7, dated 19th January 2005. Also this service is furnished by Luka Koper Inpo d.o.o.. The Tariff covers waste management and regular waste collection service.

2.2.16 Conclusions

The system of financing and charging of the port of Koper – that represents the Slovenian picture - is heavily conditioned by the very special institutional situation that has characterised and still characterises this country, taking particularly into account:

- the Luka Koper nature of public socially owned Company till 1992, practically pertaining to the community that was owning and controlling everything in the country including the port land and infrastructure;
- its transformation into a private Company in which the State continues however to maintain a predominant position.

In both cases, Luka Koper has been indicated by its Deputy Chief Executive basically as *an independent self-sustained/self-funding Company*. To this purpose, even if under a formal point of view, this statement could be considered at least as partially true, under a substantial point of view, it results somehow different.

As a matter of fact, during the first period of its activity (i.e. from 1976 till the end of the years '80³¹), Luka Koper has obtained some special contributions from other Slovenian enterprises and these funds were acquired without any expenses or obligations of refund; furthermore, owing to its nature of social owned Company, it did not pay any kind of rent for the utilisation of port land up to the year 2000 when the present leasing agreement was concluded. This having been the objective situation, for the whole period during which it has operated free of any charge, *it has certainly benefitted from an important indirect public contribution in addition to the contribution acquired from other Slovenian enterprises in the period 1976/end of the '80.*

Furthermore, being at that time everything of social nature, even if it has been impossible to clarify in details this other topic, it seems not to be excluded that, also the personnel costs could have had some social components not directly charged to the Company with probable indirect economic benefits for the same.

In other words, some situations strictly linked to the particular kind of political and economic regime in force during those years (and, as such, absolutely legal and formally correct) were, most probably, substantially representing special forms of public indirect port financing.

This particular legal status that lasted for more than 40 years and especially:

- the social nature of the port land property and
- the present completion of the depreciation period for the most important part of infrastructure built by Luka Koper in that period,

probably helps to understand also why leasing rates for port utilisation have been paid to the Slovenian Republic and the Koper Municipality only from the year 2000 and why, after that date, they have been kept to the present very low level, as indicated in the previous paragraphs.

This special status helps also to understand:

- why Luka Koper representative has confirmed the absence of any kind of State contribution notwithstanding the exemption from the rent payment and the special contribution from other enterprises;
- the very low level of the rents paid as from the year 2000;
- the very limited evaluation of the important public works carried out in the years by the public powers, which represent the 51% participation of the Republic of Slovenia in Luka Koper share capital;
- the fact that the infrastructure maintenance costs, formally paid by Luka Koper, substantially are then reimbursed by the State through the Port Dues.

For the first period, being everything of public nature, all works payments were considered normal public “routine” expenses not public contributions; for the same reason, the co-financing from other enterprises (a specificity of that time system of self-management of the social ownership) was too a legal procedure. After 1992, it probably has appeared (and till is considered) a normal solution to continue giving a special consideration to Luka Koper both through the application of the present very reduced rents for the use of

³¹ For more details, please refer to paragraph 5.

infrastructure/suprastructure carried out in the past and practically without or with very limited remaining depreciation and by reimbursing, through the Port Duties, the maintenance costs paid by the same Company.

Finally and always with regard to public financing, according to our opinion, another important external factor has to be taken into consideration for the indirect positive support that it may give to the port management: the enormous positive influence that the 51% participation of the Republic of Slovenia in Luka Koper share capital certainly represents and the consequent indirect benefits that it may probably allow. We make reference particularly to the better general consideration and to the increased trustworthiness on which the Company can rely on various topics and particularly on economic and financial matters, thanks to the simple presence of the State in a majority position. This objective positive element, even if officially not evidenced by the Company's management, most probably represents another important indirect form of assistance and of indirect support granted to the port of Koper and to its competitiveness.

2.3 The Netherlands

2.3.1 Work package 1

2.3.1.1 System for public financing of seaports in the Netherlands

2.3.1.1.1 Introduction

In the Netherlands, there are 15 ports that perform commercial activities. According to the National Port Council, these ports can be divided by area as follows:

- Northern ports (Delfzijl/Eemshaven, Harlingen, Den Helder);
- Noordzeekanaal area (Velsen/IJmuiden, Beverwijk, Zaanstad and Amsterdam), also referred to as Amsterdam Ports;
- Maas/Rhine delta (Vlaardingen; Schiedam; Rotterdam; Dordrecht; Moerdijk);
- Mouth of the Scheldt river (Vlissingen and Terneuzen);
- Other (Scheveningen).

In 2004, Dutch ports handled 471,286 tonnes of cargo. Almost 75% of this cargo was handled by the ports of Rotterdam / Schiedam / Vlaardingen, while 11% was handled by the port of Amsterdam. Other major ports are Velsen/IJmuiden, Terneuzen, Vlissingen, Moerdijk and Scheveningen.

Smaller ports are often associated together for specific common tasks. As an example, the ports located along the Noordzeekanaal (Velsen / IJmuiden, Beverwijk, Zaanstad and Amsterdam) work together under an organisation called Amsterdam Ports. This organisation is responsible for the nautical aspects of all port entrances to the Noordzeekanaal. This responsibility is mandated to a public entity called *Centraal Nautisch Beheer* (Central Nautical Administration, CNB). The Amsterdam Port Authority is responsible for the operations of the CNB in the Noordzeekanaal area. The following table shows the volumes handled by each of the ports.

Table 2-27: Volume handled by Dutch ports, 2004 (thousand tons)

Port	Import	Export	Total
Delfzijl	1,266	1,574	2,840
Den Helder	95	108	203
Harlingen	596	488	1,084
Velzen/IJmuiden	17,333	3,218	20,551
Beverwijk	98	319	417
Zaanstad	303	14	317
Amsterdam	38,228	13,664	51,892
Scheveningen	1,959	2,650	4,612
Rotterdam/Schiedam/Vlaardingen	271,011	81,348	352,359
Dordrecht	1,432	1,082	2,511
Moerdijk	3,085	1,412	4,497
Vlissingen	11,662	3,791	15,453
Terneuzen	11,074	3,476	14,550
Total	358,115	113,144	471,286

Source: Havenraad

Table 2-28 shows the volumes handled by the port of Amsterdam in more detail. The volumes handled by the port of Rotterdam are presented in the next section.

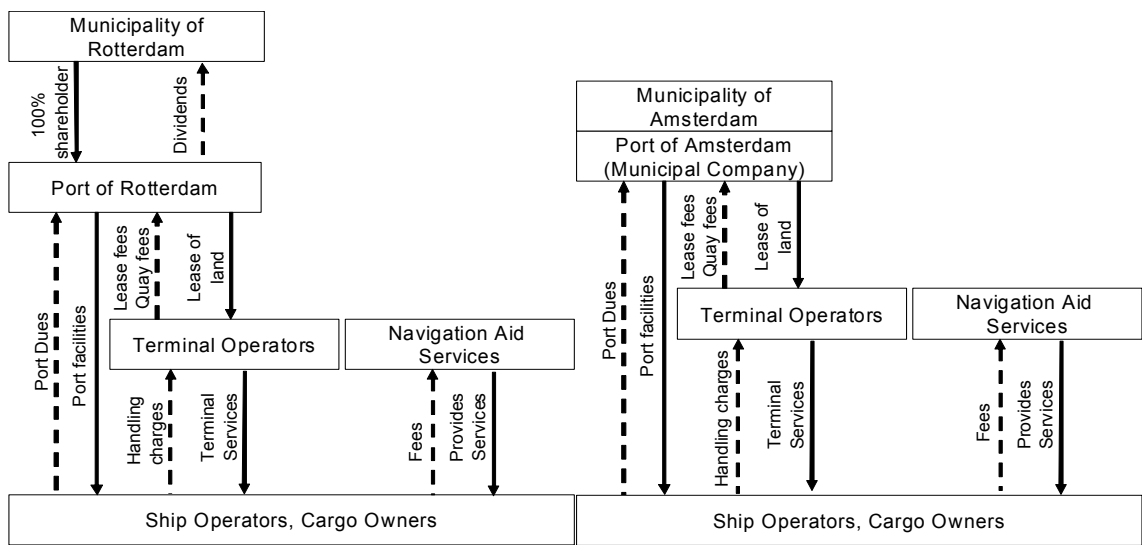
Table 2-28: Throughput Port of Amsterdam, 2004 (thousand tonnes)

	Import	Export	Total
Liquid bulk	9,765	8,409	18,174
Dry bulk	26,249	4,659	30,908
Containers	536	237	773
Roll-on Roll-off	458	169	627
Other general cargo	1,220	190	1,410
Total	38,228	13,664	51,892

2.3.1.1.2 Governance Structure

In the Netherlands, different port structures can be found. The major ports, Rotterdam and Amsterdam, are administered by a port company (*Havenbedrijf*). The port company fulfils the functions of port authority, deals with the strategic management and the planning of the port and is responsible for its operational management and marketing. In the case of Rotterdam the port company is an independent company acting under private law, but its shares are entirely in the hands of the Municipality of Rotterdam. In the case of Amsterdam, the port company is a department of the municipality and under the control of the elected alderman for port affairs. Therefore, it operates under public law. Figure 2-1 shows the governance structure of the ports of Rotterdam and Amsterdam.

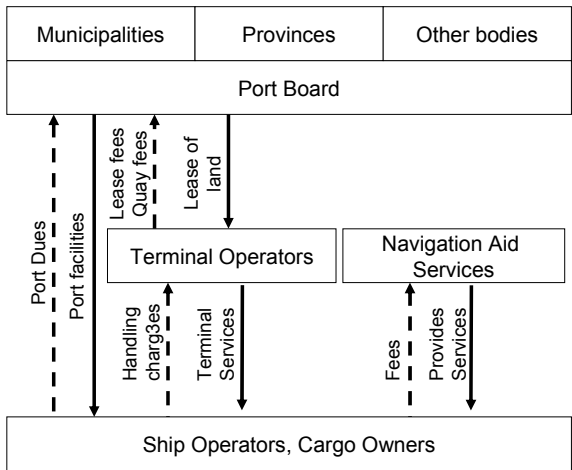
Fig. 2-1: Governance structure of the ports of Rotterdam and Amsterdam



Smaller ports are administered by a *Havenschap*, a port board, or, in some cases, the port authority is a municipal company. In the *Havenschap*, provinces and municipalities manage and operate the port together, sometimes in cooperation with other organisations, e.g. private companies. The port board takes care of the interests of all the parties involved in the port. Ports can be jointly administered and coordinated by a single port board, e.g. Groningen, which administers the twin ports of Delfzijl and Eemshaven, or like the ports in the mouth of the River Scheldt (Vlissingen and Terneuzen).

Figure 2-2 shows the governance structure of ports under a port board.

Fig. 2-2: Governance structure of the other ports in the Netherlands



Finally, there is a small number of private ports and terminals. In the Noord Zee Canal area there are the private ports of Zeehaven IJmuiden NV and Corus (both located in the Velsen/IJmuiden area) and the port of Beverwijk. Corus, a steel company, accounts for about 99% of the cargo transhipped in the Velsen/IJmuiden area, while Beverwijk is a small port specialised in niche traffics. Besides, there are the private terminals of Daalimpex, Namkade

and Velserkom. Private ports and terminals are administered as independent commercial companies.

Port companies and boards are responsible for the port management functions. They are also in charge for operation and regulation in the fields of authorisations, concessions and land use. The ports have their own rules and regulations and port dues are set port by port. All ports are represented in the national port council (*Havenraad*) that provides advice to the Government on port-related issues.

Responsibilities

The dominant port model in the Netherlands is the *landlord* port model, where the port authority leases out port land and terminal infrastructure to private companies that operate it with their own equipment. In Rotterdam and Amsterdam, the port company is the port authority, a separate independent commercial organisation, traditionally under the control of the corresponding municipality. In the Netherlands the port company is responsible for:

- Maritime authority functions that include: navigation support; traffic control by VHF from the various traffic posts and by patrol vehicles; locks management and operation; laws and regulation enforcement; environmental and other inspections, etc.;
- Maintenance of quays, piers and water depth;
- Planning the development of port land;
- Providing and leasing land to private operators;
- Promotion and marketing of the port as a whole;
- Investment in port and terminal infrastructure.

As far as cargo-handling and stevedoring activities are concerned, in principle they fall entirely into the responsibility of private operators who lease areas from the port company that has a large degree of freedom in setting lease fees in accordance with its objectives. Service tariffs are decided by the private operators without interference from the port authorities. Reference tariffs have to be published, but they can be confidentially negotiated with the users.

Nautical services are provided by private companies. Pilotage is provided by a single company at national level, whose tariffs are controlled by the Ministry of Transport, Public Works and Water Management. The tariffs for towage, mooring and unmooring are set by the individual private companies on the basis of market considerations.

2.3.1.1.3 Financing of port investment and activities

Responsibilities

With regard to the responsibilities for port investment, the following categories of port investment are identified:

- Investment in port access infrastructure, that includes breakwaters, dredging, navigation aids;

- Investment in terminal related infrastructure, that includes land reclamation, quays, piers, jetties;
- Investment in suprastructure, that includes terminal paving, warehouses, offices, cranes.

Investment in port defence and access infrastructure from the maritime side falls under the responsibility of the National Government. Thus, investments in breakwaters, capital dredging of maritime access channels, etc. are entitled to public financial support and no explicit tariff is charged for their use. As far as buoys and other navigational aids are concerned, the investment responsibility is for the State if they are outside the port area and for the port authority within the port area.

Access to the port area from the land side depends on specific agreements. In Dutch ports there is a combination of state roads (motorways), provincial roads (secondary and local roads), municipal roads (local roads) and port roads (local roads) and private roads (on terminals or other private land). Costs of port roads are assumed by the port authority. The costs for the other roads are borne by the state, province or municipality. There are few port roads, also because there are few roads for which the port is the sole beneficiary.

Rail connections fall under the responsibility of the port authority, if they are within the boundaries of the port, and under the responsibility of the competent (public) body or Railway Company if outside the port.

Land reclamation projects usually fall under the sole responsibility of the port authority. The port authority is also responsible for all investments in infrastructure within the port area, such as docks, quays, roads, channels, maintenance dredging within the port, etc.

Superstructure and equipment is in general on the account of private operators even though there may be equipment owned by the port company for the use of which the port company charges a tariff. In Amsterdam jetties, finger piers and specific mooring assets are owned by the Port Authority and leased to the industry, and only incidentally are quays and jetties financed and owned by the industry. The following table shows a specific attribution of financial responsibility for superstructure and equipment in the specific case of the port of Amsterdam.

Table 2-29: Division of responsibilities between APA and the industry

Type of suprastructure	Input form Amsterdam Port Authority
Surface arrangements	Financed/owned by industry
Paving	Financed/owned by industry, incidentally by APA
Buildings	Financed/owned by industry, incidentally by APA
Terminal Lighting	Financed/owned by industry
Parking areas	Financed/owned by industry
Gates and fences	Financed/owned by industry, especially for Port Security
Sheds	Financed/owned by industry
Warehouses	Financed/owned by industry, incidentally owned by APA and leased to industry
Staking areas	Financed/owned by industry
Tank farms and silos	Financed/owned by industry
Offices	Financed/owned by industry
Repair Shops	Financed/owned by industry
Other buildings	Financed/owned by industry, a few buildings are owned by APA and leased to industry
Cranes	Financed/owned by industry, incidentally owned by APA and leased to industry
Straddle carriers	Financed/owned by industry
Other cargo handling equipment	Financed/owned by industry

Source: Gemeentelijk Havenbedrijf Amsterdam

In general the port company may take responsibility for investments below a certain amount; above this, investments have to be sanctioned by its shareholders (generally the municipal region).

Port Authorities are not compensated for operational losses, nor do they provide non-refundable grants or loans on privileged terms to terminal operators. Private entities within the port are fully responsible for the payment of legal provisions and entirely accountable for the operational management of their companies.

Analogously, Port Authorities do not enjoy preferential treatment from the State as far as their operational management obligations and their legal provisions are concerned.

Sources of public financing

It may be useful to clearly distinguish among the three possible sources of public financing in the port sector:

- Port authorities;
- Municipalities;
- State.

The following section describes the financial measures that can be and are carried out by the three above-mentioned bodies in the port sector.

2.3.1.1.4 Port authorities

Given the specific port governance structure of the Netherlands, port authorities are to a great extent commercially independent public bodies, and they are thus responsible for raising their own finance and for carrying out investments. Their investments can be divided into two types:

- Investments in general port management and infrastructure;
- Investments in user-specific infrastructure.

The first one falls under the general responsibility of the port authority, as manager of public assets and as safe guarder of the broader public interest.

The second type entails infrastructure provision for a specific user and may be motivated by the need of the port to strengthen its strategic position. The only type of investment that falls in the latter case under the responsibility of the port authority is port terminal related infrastructure (excluding terminal equipment and suprastructure that is in principle the responsibility of the terminal operators).

2.3.1.1.5 Municipality

In general the port authority does not receive financing neither from national nor local authorities, and port investment is performed (with the exception of access infrastructure) exclusively on the account of the port authority and/or of private operators and investors. Nevertheless in order to correctly understand the link between the port authority and the respective municipality, it is necessary to distinguish among the two specific cases in the Netherlands; the case of the corporatised port authority (Rotterdam) and the case of the Municipal port Authority (Amsterdam).

What is relevant to notice in the case of Rotterdam, which will be analysed in detail in the next section, is that the corporatised Port of Rotterdam is in principle a separate entity from the Municipality of Rotterdam that acts exclusively as a shareholder. The types of investment that are undertaken by the Port of Rotterdam are listed in the port accounts and are not included in the municipal accounts. This structure in principle would make it easier to identify any contributions from the Municipality of Rotterdam to the port.

Nevertheless it could be debatable whether the municipality, as the sole shareholder of the port company, should act as a neutral (private) investor; what could be the mechanisms available to the municipality to contribute financially to the port of Rotterdam; and if there are effectively such transfers. An additional issue refers to the processes determining increases of the capital of the Port Company. These processes are in general regulated by the rules concerning the participation of Public Bodies in Private companies. In principle if the return that the Municipality of Rotterdam is obtaining from the (public) capital invested in the Port of Rotterdam is comparable with the return that could be obtained from other investments, no specific public aid is involved. From the analysis of the accounts of the port of Rotterdam, there is no reason to believe that the sums invested by the Municipality of Rotterdam in the Port of Rotterdam are generating an adequate rate of return.

The situation of the port of Amsterdam is different as the port authority is a municipal company. The Port of Amsterdam (Gemeentelijk Havenbedrijf Amsterdam – GHA) has to maintain separate accounts nevertheless. Investments undertaken by the Port of Amsterdam

have to be approved (directly or indirectly) by the Municipality of Amsterdam. Loans from the Municipality of Amsterdam to the port authority are under the terms where the interest rate is fixed yearly on the basis of all outstanding financing obligations by the city (*rente leningfonds*). In the long term this means that GHA pays interest on market conditions.

The port of Amsterdam generated a return on invested capital of 4.5 percent in 2003, as can be seen in Table 2-30.

Table 2-30: Financial key-figures of the port of Amsterdam (1. and 2. in million Euros)

	2003	2002	2001
1. Invested capital			
Total invested capital	526	489	469
Tangible fixed assets	445	409	391
Gross investments	54	48	65
2. Financial securities			
Turnover	70.4	69.9	67.5
Operating results	7.7	10.0	20.6
Depreciation	14.2	13.9	6.7
Cash-flow	21.9	23.9	27.3
Transfer to municipality	20.6	7.8	7.1
3. Key figures			
Profitability ¹	4.5%	4.7%	7.4%
Result margin ²	10.9%	11.1%	29.8%

¹ Result + interest loans as percentage of the total invested capital

² Result as percentage of the turnover

Source: Gemeentelijk Havenbedrijf Amsterdam

2.3.1.1.6 State

As far as the state is concerned, the government is responsible for the financing of those infrastructures (access and basic) that are deemed to fall under the “public scope” of the port, or because they benefit the Country as a whole, or are necessary for market failure considerations. It is often claimed that it is the responsibility of the Government to ensure the accessibility and the safety of the port. In this point of view, the Government finances capital dredging, breakwaters and other major investments.

As far as state contributions to port investment are concerned, it is worth noting that until 2003 there was a grant scheme for investments in port infrastructure, provided by the Ministry of Transport, Public Works and Water Management, called *Haveninterne Projecten II* (Internal port projects). In a four-year period, a total of around € 93 million was available under this scheme, for all ports in the Netherlands. The average subsidy per project was around 20% of the invested sum. Even though the money was allocated in the period 2000-2003, it could actually be transferred to later years. As an example, the following table shows the amounts of subsidy received by the port of Amsterdam in the period 2000-2002.

Table 2-31: Subsidies received by the port of Amsterdam, 2000-2002 (million Euros)

			2000			2001			2002		
			HIP I	HIP II	Other	HIP I	HIP II	Other	HIP I	HIP II	Other
Development Westpoort West, phase 1				-	-	-	-	-	2.5	-	-
Amsterdam Passenger Terminal				-	-	-	-	-	0.6	-	-
Restructuring Australia harbour				-	0.64	-	-	0.09	3.1	-	-
Development Westpoort, phase 2				1.4	-	-	-	-	-	1.4	-
Development Westpoort, phase 3				1.4	-	-	-	-	-	-	-
Restructuring Hem harbour				1.1	-	-	-	-	-	-	-
Restructuring West harbour, part I				0.5	-	-	-	-	-	-	-
Total				5.1			0.9		3.5		

Source: Gemeentelijk Havenbedrijf Amsterdam

An additional remark refers to the financial plan for the large extension of the port of Rotterdam (Maasvlakte II), as it involves a large capital transfer from the National Government to the Port of Rotterdam. The financial plan will include the increase in the capital of the Port Company, in accordance to the acquisition by the Government of 33% of the shares of the Port Company. Momentarily the project has been delayed for 18 months by the Parliament.

2.3.1.2 Public financing in the port of Rotterdam

2.3.1.2.1 Introduction

The Port of Rotterdam covers approximately 10,500 hectares and is a major contributor to the national and regional economy. The port is a hub in the international goods flows and a business location for industry and logistics services.

The port of Rotterdam is a multi-purpose port in which substantial traffics are oil, chemicals and containers. The handling of containers in Rotterdam is concentrated in two locations: the Maasvlakte and the Waalhaven/Eemhaven area. The latter is situated more inland. Large container ships are handled at the Maasvlakte, as the Waalhaven and Eemhaven area specialises in short sea shipping.

Table 2-32: Throughput Port of Rotterdam, 2003 (thousand tons)

Type of cargo	Throughput
General cargo:	102.2
Containers	82.4
Roll on / roll off	11.0
Other general cargo	8.8
Dry bulk	89.3
Ore / scrap	42.2
Coal	25.3
Agri bulk	10.6
Other dry bulk	11.2
Liquid bulk	160.9
Crude oil	102.1
Mineral oil products	33.2
Other liquid bulk	25.6
Total through put	352.4

2.3.1.2.2 Governance structure

The Port of Rotterdam (Havenbedrijf Rotterdam NV) is legally a private entity. On behalf of the national government, the Harbour Master (acting as national and municipal HM) is mandated to act under public law.

The Port of Rotterdam used to be administered by a separate branch of the Municipal Government - the Rotterdam Municipal Port Management (RMPM or Gemeentelijk Havenbedrijf Rotterdam) - led by the elected Alderman for Port Affairs. The Port Authority was the executive body of RMPM. As of the first of January 2004³², the RMPM, has become a government corporation: Port of Rotterdam (Havenbedrijf Rotterdam NV). The Municipality of Rotterdam is the sole shareholder of the Port of Rotterdam.

Port activities have been embedded in three divisions: the Commercial Division, the Division Port Infrastructure and the Division Rotterdam Port Authority. Five policy units are responsible for activities that include developing policy, communication and support in the finance, personnel and ICT fields. The Executive Board holds overall responsibility. At the top of the company there is a Supervisory Board constituted of no more than five directors including its chairperson. The Supervisory Board may be enlarged to a maximum of seven members.

2.3.1.2.3 Public investment in port infrastructure in Rotterdam in 2003

Investment responsibilities in the port can be grouped in three major categories. Sea-access infrastructure – that is the infrastructure that allows access to the port such as access channels, fairways, dredging works, protection works, breakwaters; navigation aids outside

³² As far as the present analysis is concerned, figures and data and in general the overall analysis refers to 2003 for conformity with the entire report. It has been considered relevant nevertheless to explain and refer also to the situation after first of January 2004 as the corporatisation of the port modified substantially the relations between the port of Rotterdam and the Municipality of Rotterdam.

the port boundary – is the responsibility of the national government. Access infrastructure from the land side – which includes road and rail connections as well as inland waterways connections to the port area – is the responsibility of either local authorities or the national government.

Terminal related infrastructure – which includes all the civil works within the port area that allow the supply of services to ships and cargoes in the context of a specific terminal or operator, such as quays, jetties, finger piers; specific mooring assets; etc. – is the responsibility of the Port Authority, even if some companies build and own their own jetties. Finally terminal superstructure and equipment is the sole responsibility of terminal operators. The subdivision can be summarised in the following table.

Table 2-33: Financing Structure (per category)

Type of Infrastructure	Responsibility
Access infrastructure	Central Government
- by sea	
- by land	
Terminal related infrastructure	Port Authority
Terminal superstructure and equipment	Private companies
	Tailor-made arrangements by Port Authority

Source: Port of Rotterdam

The following table shows a more detailed overview of responsibilities within the port of Rotterdam. As far as access infrastructure is concerned, it is in general difficult to quantify the investment responsibilities, as this type of investments happen *una tantum* and their financial constructions are different from time to time. In general though, infrastructure that is believed to be part of the ‘national assets’ and is perceived as essential component of the transportation network of the country used to be entirely the responsibility of the national Government.

With the exception of port superstructure and equipment, whose responsibility falls on private operators, and river dredging, which is done by the government, all the investment within the port area is the sole responsibility of the port authority.

Table 2-34: Port investment responsibilities for the port of Rotterdam

Category	Element	Responsibility
Land development	Development of new port areas	Port Authority Government
Maritime infrastructure	Capital dredging	Government Port Authority
	Sea locks, dams & exterior breakwaters	Government 66% Port Authority 33%
	VTS/Radar	Government 66% Port Authority 33%
	Light buoys & navigational aids	Government
Port infrastructure	Land reclamation	Port Authority Government
	Internal locks, Docks, quays, Light buoys & navigational aids, River berth & harbour basin dredging	Port Authority
Port superstructure	Pavements, Warehouses, sheds, Cranes and gantries, Link-spans, pontoons, Terminal and office buildings, Leasing/renting	Private
Public utilities:	Fire fighting, Police, Pollution Control	Municipality/Port Authority/Government
Infrastructure links	Railways & metro links in area	State Railway company Municipality
	Roads in area, Canals in area	Port authority
	Tunnels & bridges in area	National Government Port Authority
Port maintenance	Maritime infrastructure maintenance	Government
	Maintenance of port infrastructure and superstructure	Port Authority
Port services	Cargo handling	Private
	Technical-nautical services	Private

Source: Compiled by the authors on various sources

In 2003, the port of Rotterdam was still a municipal service of the Municipality of Rotterdam. The public investment amounts given in this section are referring to that period. Turnover of the port authority in the year 2003 was € 401 million. The net result was € 56 million. The following table shows the income statement for the years 2000-2003.

Table 2-35: Income Statement of the Port of Rotterdam (million Euros)

	2003	2002	2001	2000
Turnover	401	397	384	372
Personnel costs	77	70	64	5
Other operating costs	107	112	111	98
Results before interest and depreciation/amortisation	217	215	209	216
Depreciation/amortisation	85	80	79	73
Results from participating interests	132	135	130	143
Balance of interest income and interest costs	-7	-2	-4	-1
Results from ordinary business activities	53	63	56	54
Extraordinary income and expenses	72	70	70	86
Net result	16	14	9	9

Source: Port of Rotterdam

Aggregated figures for 2003 with the historical investments until 2004 are provided in the following table.

Table 2-36: Port investment responsibilities for port of Rotterdam (million Euros)

	Investments in 2003	Historical investments until 2004
Site preparation	117	608
Quays and mooring assets	28	956
Totals	145	1,564

Source: Port of Rotterdam

2.3.2 Work package 2

The income of Dutch port authorities consists of lease revenues from land granted to private operators, quay dues and harbour dues. The major source of income for port authorities are port dues that account for approximately 55% of their total revenues. Leases and rents are the second source of income, and account for approximately 40% of total revenues. Minor sources of income are revenues from periodical passes for inland shipping, and Vessel Traffic Management System fees. This section focuses on the structure of the charging systems both for terminal operators and for ship operators.

2.3.2.1 Charging practices to terminal operators at national level

Port authorities charge the terminal operators in two ways, through:

- Sale, rent or leasehold of land;
- Quay fees.

Lease fees and quay fees are an important source of income for the Dutch ports. In the port of Rotterdam these amounted to 152 million Euros (38 % of the total turnover), while in Amsterdam these were 41.4 million Euros (56% of the total operating income of 2003).

2.3.2.1.1 Rents and leases

Theoretically there are 3 options for Dutch terminal operators to acquire land in Dutch ports: purchase, rental or leasehold. Several ports, e.g. the ports of Moerdijk, Vlissingen en Terneuzen, offer the option to buy the land, while the Seaport IJmuiden and Corus are private ports. But, many ports only offer rental and lease options, in particular the ports of Rotterdam and Amsterdam (though also in the port of Amsterdam some sites are in private hands). The difference between rental and leasehold depends on the conditions under which the land is made available.

Most land in the port area is contracted through rents and leases for a period up to 50 years (25 years plus a 25-year renewal option). The fee is set per square metre, with different fees according to the type of site. The fees include land and in some cases paving. The lessee is responsible for the superstructure and equipment. After expiration of the lease, the land has to be returned to the port Authority in the state in which it was delivered, unless otherwise agreed.

Lease fees are in principle set on the basis of market prices. These depend on depth in front of the terminal, technical characteristics of the land, area and purpose. Apparently, however, 'market conditions', in a market such as this of port land, often do not reflect the opportunity cost of the land leased. Also, it is difficult to determine whether the lease fees actually cover the cost price.

According to Expertisecentrum PMR, the Amsterdam port authority uses a differentiation of lease rates to attract specific companies for specific sites. This is done by using a land price model. Every year the city council determines a list of base prices. The actual land price for a specific site is then determined by the base price and by taking a series of factors into account. These factors concern both the specifics of the site (e.g. quality or location of the site) as well as of the company that wants to lease it (e.g. branch or specific activities). Because of this method, companies may pay different amounts for the same site.

Leases are adjusted yearly according to inflation. The port uses the official Dutch inflation index of the year before, compared to the inflation index of six years earlier.

The approach is similar in Rotterdam. Lease fees are agreed upon on an individual basis, they are based on square meter flat rate, and they depend on the location of the terminal; the type of infrastructure and facilities provided; the position of the terminal with respect to transportation links; and the role the terminal operator plays in long term port strategy. The terms of the lease may or may not include paving.

Strategic considerations do indeed play a role in the setting of lease fees, and the specific port business model adopted may have more influence on leases than cost considerations alone. It should be noted in this respect, given the long time horizon over which lease fees are set, that port strategies may change in the course of the lease agreement and, consequently, lease fees may differ from terminal to terminal, depending on the captivity of the type of traffic, competition with other ports, the role of integrated logistic operators and market conditions related to port dues for the various types of traffic.

2.3.2.1.2 Quay fees

Port authorities charge terminal operators for having a quay at their disposal. The charge is a fixed amount per metre of quay, depending on the guaranteed water depth in front of the quay and on the type of quay. The fee is independent of the purpose of the quay and the frequency of its use, but it generally differentiates between quays with or without a quay-wall. The port authority is responsible for the maintenance of the quay and the quay wall. Each port has its own rates. As an indication of the level of these fees, the following table gives an example of the quay fees for terminal operators in the Port of Moerdijk. Quay fees are integral costs of terminal operators, and they are included in handling charges of the terminal.

Table 2-37: Quay fees in the Oort of Moerdijk (Euros/metre length/year)

Water depth in front of quay	Quay is a wall	Quay is a bank
2 metres	22.96	8.12
3 metres	60.56	20.20
4 metres	87.52	32.56
5 or 6 metres	109.20	40.44
7 metres	132.20	50.76
8 metres	153.08	61.40
9 metres	175.00	73.68
10 metres	219.48	83.28
More than 10 metres	219.48	83.28
Plus amount per extra metre	44,52	18.20

Source: Port of Amsterdam

2.3.2.2 Charging practices to ship operators at national level

The structure of the port charging framework is discussed at national level, as far as what constitutes charges, dues and fees that can be collected in the ports of the Netherlands. The actual levels of charges, dues and fees are autonomously decided by each port. The Dutch system allows for the following charges:

- Harbour dues for sea-going vessels;
- Harbour dues for inland vessels;
- Quay dues;
- Buoy dues;
- Waste Disposal dues;
- Vessel Traffic System;
- Reporting of vessels;
- Pilotage;
- Towage;
- Mooring and unmooring.

Some charges are paid to port authorities, while others are paid to private operators, i.e. pilotage, towage, mooring and unmooring.

Port charges are the most important source of income for port authorities, followed by leases. In Rotterdam, port charges amount to 201 million Euros for seagoing vessels and 10 million Euros for inland vessels, while in the port of Amsterdam these amount to 23,8 million Euros and 2,6 million Euros respectively in 2003.

The following table shows an overview of the division of port dues in the port of Amsterdam.

Table 2-38: Seaport dues of the port of Amsterdam (Euros/year)

Seaport dues	2003	2004
Coal	4,192,184	4,344,136
Ores/Scrap	383,395	345,066
Refined products	6,881,994	8,344,430
Grains / derivatives / oilseeds	4,607,481	5,146,147
Other bulk	5,016,497	5,140,310
Conventional general cargo	688,564	690,197
Containers / flats	431,829	433,602
Other general cargo	962,842	938,039
Other	591,849	557,347
Total	23,756,635	25,939,274

Source: Port of Amsterdam

2.3.2.2.1 Harbour dues for seagoing vessels

Harbour dues for seagoing vessels are collected by the municipality/port authority. They depend on ship size (GT) and the amount of cargo loaded or discharged during the visit. It is the port that determines the amount per GT or per tonne loaded or unloaded. The rate is charged on the basis of the time spent in port. For ships in lay-up there is a separate rate.

A distinction is made between ships that sail in liner services and others. Also, there are discounts on the basis of the number of visits in case of feeder or short sea vessels. Besides, there are specific reductions. These can be for ships with segregated ballast tanks or a green award certificate.

2.3.2.2.2 Harbour dues for inland vessels

These are collected by the municipality/port authority. There is no specific framework on the charging of harbour dues for inland vessels. Ports have different systems for collecting harbour dues. In Rotterdam, the dues are calculated on the basis of the vessel's deadweight (cargo ships), surface area (passenger ships and yachts) or GT (seagoing fishing vessels). In other ports the system is slightly different.

2.3.2.2.3 Quay dues

Most quays are part of a terminal and therefore leased with it. In these cases a quay fee is paid by the terminal operator to the port authority (see previous section). In that case, quay dues are included in handling costs. Only when a ship uses communal quays, the port authority charges directly the ship-owner.

The way quay dues are calculated differs per port. In Rotterdam, quay dues depend on the overall length of the ship and the time the quay is used. The Amsterdam system is more complicated and depends on the size of the ship (GT), the duration of the use of the quay, and the specific use.

2.3.2.2.4 Buoy dues

Buoy dues are charged on either the length or the GT of the ship and on the time the buoy is used. Buoy dues are collected by the municipality/port authority.

2.3.2.2.5 Waste disposal dues

Waste disposal dues are collected in every Dutch port, but no national rate charging practice is in place. For instance, the Port of Amsterdam charges waste disposal dues on the basis of GT, while the Port of Rotterdam charges on the basis of main engine capacity. Waste disposal dues give the ship the right to hand in up to a specific amount of waste. If the ship hands in more waste, the ship operator has to pay extra.

2.3.2.2.6 Vessel traffic system

The vessel traffic system charges by the length of the ship. Ships under a specific length are not charged, while there is a maximum above a specific length. In between, the amount increases linearly, based on length.

2.3.2.2.7 Reporting of vessels

Ships in Rotterdam have to pay for reporting the vessel. The ship is reported to a private company, called Dirkzwager. The amount depends on the deadweight of the ship, and has to be paid to Dirkzwager. Container ships pay a different (lower) rate.

2.3.2.2.8 Pilotage

Pilotage in the Netherlands is the responsibility of a private company, called Loodswezen. The company is owned by the pilots who work for the company. Loodswezen hold a monopoly and is responsible for pilotage in the entire country, although the company is organised according to area:

- Regio Noord;
- Regio Amsterdam-IJmond;
- Regio Rotterdam-Rijnmond;
- Regio Scheldemonden.

Rates are set by the Ministry of transport, Public works and Water Management. Two different pilots can be distinguished:

- Sea pilots;
- River pilots.

Until 2005, rates were equal in each port. Since March 2005, this is no longer the case and rates vary according to region. Sea pilotage charges consist of a fixed amount regardless of

the length of piloting. The level of charges is determined on the basis of the actual draft of the ship. Rates for river pilotage depend on the actual distance sailed inside the port area and the actual draft of the ship.

2.3.2.2.9 Towage

Harbour towage is carried out by private companies. There are several private companies, each of which has its own charging system.

2.3.2.2.10 Mooring and unmooring

Mooring and unmooring is carried out by private companies. They have their own charging system.

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2.4 Estonia

2.4.1 Work package 1

2.4.1.1 System for public financing of seaports in Estonia

2.4.1.1.1 Introduction

In total there are 31 ports in Estonia handling commercial traffic. Fourteen of them are major ports. The most important port is the port of Tallinn, which handled 37.4 million tons in 2004. This accounts for almost 80 percent of the total amount of cargo handled in Estonia. Besides Tallinn, there are two other important ports, the ports of Pärnu and Kunda, which have a market share of about 4 % each. Russia in particular is an important part of their hinterland, and large amounts of cargo consist only of transshipment. The following table presents an overview of the amount of cargo handled by Estonian ports, in the period 1995-2003.

Table 2-39: Cargo handled by Estonian ports (millions of tonnes)

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tallinn	14.1	17.1	21.4	26.4	29.3	32.3	37.8	37.6	37.4 ³³
Other Estonia Ports	3.2	6.1	6.0	8.0	10.5	9.0	9.0	9.6	8.8
Total	17.3	23.2	27.4	34.4	39.8	41.3	46.8	47.2	46.2

Source: Port of Tallinn

The port of Tallinn consists of four harbours, spread along the Tallinn coastline: Old City, Muuga, Paljassaare and Paldiski South harbour. Old city harbour and Paljassaare are located directly next to the city. The first one is a major passenger port. Muuga harbour, located 17 kilometres east from Tallinn, is the newest and biggest of the four harbours. It was established in 1986. About 75 % of the cargo transhipped in Muuga Harbour concerns crude oil and oil products, but also dry bulk and containers are handled here. Besides, the harbour offers a freezone. Paldiski South Harbour is located 50 kilometres west of Tallinn. The harbour is mainly involved in ro-ro, liquid bulk and metals. The harbour is not to be confused with the Paldiski Northern Harbour, which is no part of the Tallinn port. A new, fifth, harbour is being developed in Saaremaa, and is to host cruise and passenger traffic. It will be completed in the spring of 2006. The harbour can receive vessels up to 300 metres long. The total port territory of the four harbours together is 607 ha.

³³ In 2004 the amount of cargo was calculated using a modified definition, according to Eurostat requirements.

Table 2-40: Territory of Tallinn harbours

<i>Harbour</i>	<i>Port territory (ha)</i>	<i>Total quay length (m)</i>
Muuga harbour	451.0	4,710
Old city harbour	54.2	4,074
Paljassaare harbour	43.6	1,859
Paldiski south harbour	58.0	1,207
Total	606.8	11,850

Source: Port of Tallinn

In 2004 the port of Tallinn handled 37.4 million tons of cargo. Besides cargo port, Tallinn is also the largest passenger port in the Baltic States. There is significant ferry traffic, specifically between Tallinn and Helsinki, located 80 kilometres north of Tallinn. The following table shows the amounts of cargo handled by the port, specified by cargo group. The table shows that, measured in tons, oil products are by far the major type of cargo, followed by vehicles and fertilisers.

Table 2-41: Cargo handled by the port of Tallinn (thousand tons)

<i>Cargo group</i>	<i>2003</i>	<i>2002</i>
Oil products	23,814	24,275
Vehicles	5,296	4,858
Fertilisers	2,210	2,737
Coal	1,825	1,169
Containers	1,072	948
Grain	987	1,558
Ferrous metal	745	336
Timber	685	706
Other	1,029	1,268
Total	37,633	37,855

Source: Port of Tallinn

The port of Tallinn is also a major passenger port. The following table shows the number of passengers in the Port of Tallinn. The significant growth in 2004 can be accounted for by increase of the number of passengers coming from Helsinki.

Table 2-42: Number of passengers in the port of Tallinn (million passengers)

	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
Number of passengers	5.74	5.95	5.86	6.74

Source: Port of Tallinn

The port of Pärnu is located at the mouth of the Pärnu River, in the southwest of Estonia. In 2002, the port handled 1.93 millions tons of goods. Main exports consist of forest products. The port of Kunda is located on the northern coast of the Gulf of Finland. The port can handle small ships up to of 8,000 dwt and a draught up to 9.5 metres. The port has four quays. In 2002 the port handled 1.73 million tons of cargo. Main commodities are: cement and forest products.

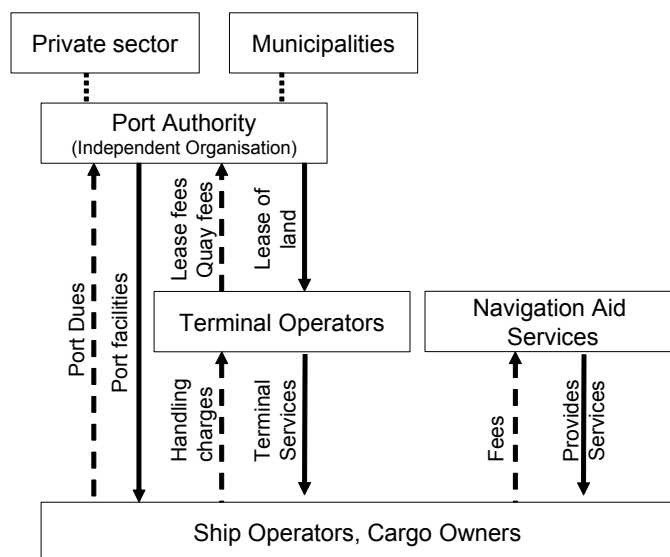
2.4.1.1.2 Governance Structure

The Estonian Ports Act regulates the obligations of port authorities, concerning safety and procedures relating to State supervision of the ports. The following citation is taken from the Ports Act and states the obligations of the port authorities:

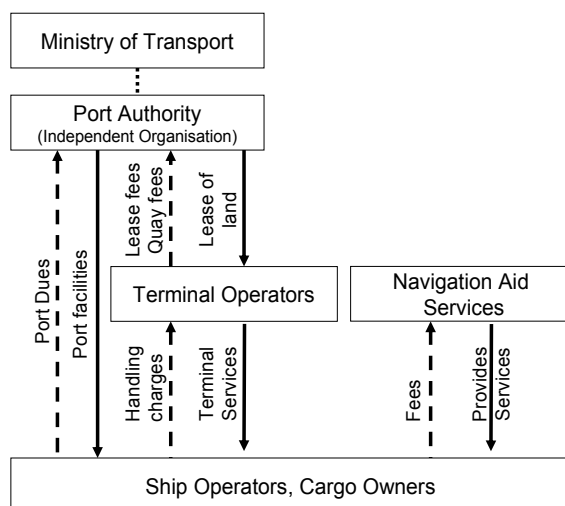
- *A port authority is required to ensure:*
 - *The maintenance of hydro-technical structures in the port area;*
 - *The installation and maintenance of navigation marks in the port area and, outside the port area, of those marks which provide service;*
 - *The declared depths in the water area and entrance of the port according to the fair sheet;*
 - *Supervision over the import of dangerous goods into the port and warehousing, storage and transshipment thereof in the port;*
 - *The cleanliness and order of the port area, and compliance with fire and safety requirements in the port.*
- *A port authority shall administer the reconstruction of the entrance and water area of the port, and monitor the correctness of the declared information;*
- *A port authority shall administer the receipt of bilge water, sewage, refuse and other pollutants from the ships;*
- *A port authority shall organise operations for the elimination of pollution in the port area.*

Control of maritime safety is the responsibility of the Estonia Maritime Administration, which is a governmental unit under the Ministry of Economic Affairs. It defines its principal aim as “to ensure safe navigation in Estonian territorial and inland waters, perform flag state implementation and port state control activities”. The administration is, among others, responsible for installation and maintenance of aids to navigation, perform hydrographical surveys, monitoring vessel traffic in Estonian waters and arranging icebreaking services in ice conditions. The fleet of the Maritime Administration consists of an ice breaker, buoy tender ships and hydrographical survey ships.

All ports in Estonia are operated as public limited companies based on corporate law. Some ports are a hundred percent state owned while other ports are privately owned. In certain cases there is a mixed ownership structure. In the port of Tallinn, all shares of the port company are in hands of the State. The port of Kunda and its facilities are entirely privately owned. In the port of Pärnu, the northern port of Paldiski and the Miiduranna port, municipal authorities together with private companies have shareholding interests. In Pärnu, for example, the port company of Pärnu Sadam AS, is partly owned by a private company, Transcom AS (50.6 % of the shares) and partly by the Municipality of Pärnu (41 % of the share).

Fig. 2-3: Governance structure of private Estonian ports

The Port of Tallinn operates according to the landlord port model. Since 1997 all superstructure and equipment are owned and operated by private companies, Figure 2-4 shows the governance structure of the port of Tallinn. The supervisory board consists of representatives of the Estonian Ministries of Finance and of Transport and Communication.

Fig. 2-4: Governance structure of the ports of Tallinn

2.4.1.2 Public Financing in the port of Tallin

2.4.1.2.1 Introduction

The following table summarises the responsibilities within the port of Tallinn.

Table 2-43: Port investment responsibilities for port of Tallinn

<i>Category</i>	<i>Element</i>	<i>Responsibility</i>
Land development	Development of new port areas	Port Authority
Maritime infrastructure	Capital dredging	Port Authority
	Sea locks, dams & exterior breakwaters	Port Authority
	VTS/Radar	Maritime Administration
	Light buoys & navigational aids	Maritime Administration
Port infrastructure	Land reclamation	Port authority
	Internal locks, Docks, quays, Light buoys & navigational aids, River berth & harbour basin dredging	Port authority
Port superstructure	Pavements, Warehouses, sheds, Cranes and gantries, Link-spans, pontoons, Terminal and office buildings, Leasing/renting	Private operators
Public utilities:	Fire fighting, Police, Pollution Control	Government
Infrastructure links	Railways & metro links in area	Terminal operators
	Roads in area, Canals in area	Port Authority
	Tunnels & bridges in area	Port Authority
Port maintenance	Maritime infrastructure maintenance	Port authority
	Maintenance of port infrastructure and superstructure	Port authority and private operators
Port services	Cargo handling	Private operators
	Technical-nautical services	Private operators

Source: Compiled by the authors on various sources

The following table shows the income statement of the port of Tallinn. The sales revenue of the port was EUR 67.9 million in the year 2004, while other income was 0.8 million Euros. Operating profit was EUR 34.4 million.

Table 2-44: Income statement of the Port of Tallinn (thousand Euros³⁴)

	2004	2003
Sales revenue	67,863	61,391
Other income	854	1,294
Operating expenses	-14,708	-16,200
Personnel expenses	-9,046	-9,314
Depreciation and impairment	-9,667	-10,056
Other expenses	-850	-8,873
Operating profit	34,444	18,241
Financial income and expenses	-2,214	-400
Profit from ordinary activities	32,230	17,842
Income tax	-6,816	-3,092
Net profit for the period	25,414	14,750

Source: Port of Tallinn

The total assets of the Port of Tallinn in 2004 amounted to € 358 million, of which € 345 million was in the form of fixed assets. Also, the port of Tallinn is (co)-owner of three small companies: AS EDI Vektor (100%), OÜ Tallinna Sadama Elektrivork (100%) and AS Green Marine (51%). Total investments in these subsidiaries amount to € 287,000.

The Port of Tallinn can be financed through market loans. Bank loans are awarded on the basis of the financial capabilities of the port. Bonds of the port of Tallinn are listed on the Tallinn stock exchange.

Of the total revenues of the Port of Tallinn, port charges, specifically port dues and cargo charges, were the major sources of income. In total they amounted to € 56.6 million (84% of total income), with € 37.1 million for port dues and € 10.5 million for passenger dues respectively. Lease fees (rental income) form only a small share of the total income of the port authority (8.3 %). The following table shows the revenues of port of Tallinn in the period 2002-2004.

Table 2-45: Revenues by type of activity (thousand Euros)

	2004	2003	2002
Port dues	37,060	34,058	33,567
Cargo charge	11,394	10,455	10,293
Passenger dues	8,139	5,892	6,987
Rental income	5,695	5,505	4,968
Sale of services	5,575	5,481	5,449
Total	67,863	61,391	61,264

Source: Port of Tallinn

According to the annual report of the Port of Tallinn, the port received one small subsidy in the year 2004. This subsidy was received from the Environmental Investment Centre for the design of a waste processing and recycling facility for noxious waste of vessels. The subsidy

³⁴ All figures in this chapter are not presented in local currency, but in Euros as they were presented in the Annual report of the port of Tallinn

amounted to € 29,000. In 2005 the Environmental Investment Centre awarded another grant of € 7,290. No grants were reported in the years 2003 and 2002.

The Port of Tallinn is an important source of income for the Government. A large part of the net profit made by the port authority is paid to the Government in the form of dividends. In 2004, 76 percent of the net profit of € 25.4 million was paid to the Government. In 2003, the share was 58 percent. The following table shows an overview of profits and dividends paid.

Table 2-46: Profit and dividends paid to the State (thousand Euros)

	2004	2003	2002
Operating profit	34,444	18,241	27,585
Net profit	25,414	14,750	27,710
Dividends	19,398	8,545	19,343
% of net profit paid as dividend	76%	58%	70%

Source: Port of Tallinn

Until 2002, dividends paid by the port company to the State were not subject to income tax. As off 2003, however, the port company has to pay a dividend tax, which in 2004 amounted to € 6.8 million and in 2003 to € 3.1 million.

In 2003 the State tried to withdraw money from the port company by cancelling shares of a value equal to the book value of the Paljassaare Harbour assets, amounting to € 6.4 million. The planning was to transfer assets of Paljassaare Harbour to the State. As the harbour was not actually transferred it was originally presented as a liability in the balance sheet. In 2004 the State decided to reverse the former transaction by converting the liability to shareholders to share capital again.

2.4.2 Work package 2

2.4.2.1 Charging practices to terminal operators at national level

The real estate owned by the Port of Tallinn comprises both land and buildings (including quays). Although the Port of Tallinn does not invest in superstructure, buildings still form a considerable part of the value of the non-current assets, and are multiple of the value of land. In 2003 the net book value of land and buildings was € 268 m.

In the 2002 annual report the Port of Tallinn explains the type and status of the buildings they still possess. It concerns buildings that *“have been in its use for more than half of their useful life”*. In the contracts the Port Authority limits the use of these assets to specific fields of activity. When the asset is returned to the port authority it has to be returned in the same state as it was rented. Majority of non-residential lease contracts have no maturity dates.

Land is leased out by the port authority for periods of up to 100 years. The price is charged per square metre, per year. An indication of the price is the price for land in the Muuga port. Leaseholds here are 39-99 years, and the price is € 3, per square metre per year.

Total rental income is € 5.695 million per year. This is only a small part of the total income of the Port of Tallinn.

2.4.2.2 Charging practices to ship operators at national level

Estonia has three types of national dues:

- Lighthouse and ice dues (based on GT): These are levied by the Estonian Maritime Board;
- Pilotage dues (based on GT and distance): Pilotage is provided by Eesti Loots AS. Dues are calculated on the basis of a regulation of the Ministry of Transport and Communication. Rates are set on the basis of GT and distance. The sea area is divided into five areas (Tallinn, Kunda – Loksa, Paldiski, Väinamere (West-Estonian Archipelago), Pärnu.

Besides national dues, the Port of Tallinn receives also the following:

- Port pilotage dues;
- Tonnage dues;
- Quay dues;
- Mooring dues;
- Passenger fee.

Within the port, pilotage is carried out by port pilots and dues are levied according to the GT of the ship.

Tonnage dues are calculated on the basis of GT and surcharges are imposed on single hull tankers. Discounts apply to reefer vessels, and vessels loading timber. Passenger vessels pay tonnage dues. Discounts are applicable to passenger vessels depending on the number of calls; to vessels taking bunkers only; fishing vessels; and reefer vessels.

Quay charges are levied to vessels on the basis of their GT. Deductions apply for passenger vessels on regular liner services and for cruise vessels, yachts and sailing vessels that call multiple times per year.

Mooring dues are levied on the basis of GT separately for every mooring operation. In some cases special terms apply:

- Extra charges for mooring and pilotage dues apply from 6 p.m. to 6 a.m. and on national and public holidays;
- Tonnage dues and quay charges are reduced for liners depending on the number of calls.

Passenger dues are levied upon arrival or departure of a vessel according to the number of embarking/disembarking passengers. Passenger dues are levied regardless of whether the passenger disembarks or not.

A cargo charge is levied on ro-ro cargo of clients who have not concluded contracts on the use of infrastructure with the port of Tallinn. The charge is levied both on self-propelled means of transport and on non-self-propelled means of transport. The charge is a fixed amount per unit.

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Luukas, I., Chairman of the board, Transiidikeskuse AS.

2.5 Latvia

2.5.1 Work package 1

2.5.1.1 System for public financing of seaports in the Latvia

2.5.1.1.1 Introduction

There are ten commercial ports in Latvia. The three main ones are Ventspils, Riga and Liepaja. These ports are major gateways of the CIS countries and between 60 and 90% of their cargo is transit cargo. All the ports are next to special economic zones and they are ice-free all year round.

2.5.1.1.1.1 The Free Port of Ventspils

The port of Ventspils is the biggest port in the Baltic region in terms of traffic and one of the major crossroads of eastbound and westbound cargo routes. Ventspils is Latvia's most important oil transit port, serving at its oil and liquid chemical transshipment area vessels up to 130,000 dwt and 17.5 metres of draught. The completion of the dredging works in the sea entrance channel and the port area in 1998 allows the largest vessels capable of entering the Baltic Sea to be berthed in the port. The dredging of the Venta river navigation channel was completed in 1999 allowing vessels of up to 15.5 metres to be berthed in Ventspils general cargo terminals. Other major cargoes are metals, potash salts, timber, ferroalloys and general cargoes.

The total area of the port is 2,624 ha with 11,012 metres of quays. Facilities at the port include more than 60 berths, a total tank farm capacity exceeding 1,500,000 cubic metres, 75,000 cubic metres of roofed storage area for fertilisers and 180,000 square metres for metal, wood products, timber, etc. In 2000 the new multipurpose ro-ro and container terminal became available, including 5,000 square metres of cold storage area.

The Free Port of Ventspils alone handles half of the freight of Latvian ports. Being the leading ice-free port, it is a well known international transit centre for petroleum and chemical products, potassium sulphate, coal as well as metals. Cargo of 27.3 million tons was transhipped through Ventspils in 2003. More than two thirds of this was liquid cargo, of which more than 70% were oil products.

Table 2-47: Volume handled by the port of Ventspils (thousand tons and percentages)

	2000	2001	2002	2003	2004
Total cargo throughput	34,757	37,937	28,704	27,351	27,809
% liquid cargo				67.6	63.7
% dry bulk				29.2	33.1
% General cargo				3.2	3.2

Source: Port of Ventspils

The port is directly linked by rail to Riga and Moscow, and by road to Riga and from there to the Baltic and CIS road network. The port is connected to oil extraction fields and major

pipeline transportation routes of Russia by two pipelines to Novopolotsk: the crude oil pipeline with an annual capacity of 16 million tons and the oil product pipeline, with a capacity of six million tons.

The port has also regular ferry connections to Nynäshamn in Sweden and to Lübeck in Germany, and it is closely located to the recently developed Ventspils airport, that has recently completed its first construction and modernisation phase.

The largest terminal operator in the port is SIA Ventspils Nafta Terminals. Ventspils Nafta is one of the biggest companies for the transshipment of crude oil and petroleum products. The largest shareholders of the company are JSC Latvijas Naftas Tranzits (42%) and the Republic of Latvia (39%). Ventspils Nafta is also the company with the largest interests in the Latvian Shipping Company (LASCO) with one-third of its shares. Other important liquid bulk terminal operators are VentBunkers, that deals with bunkering, transshipment of oil products and provision of port services, A/S Ventamonjaks, that deals with chemical cargoes, and SIA Vars, specialised in the reception, storage and transshipment of liquid chemical products to sea-going vessels.

Major drybulk terminal operator is A/S Kalija Parks, that is one of the world's largest terminal for handling potash and other bulk fertilisers. Among the major general cargo operators there is also Noord Natie Ventspils Terminal, that handles general cargo, containers and ro-ro. Ventspils commercial port is one of the largest stevedoring companies in the Baltic region and it has a number of multipurpose terminals for general cargo, break bulk and bulk. Ventplac and Ventspils Zvejas Osta handle wood and wood products.

The port invests considerably in new infrastructure and in the modernisation of its logistical platforms. Major projects include the realisation of a ferry terminal, the completion of the grain terminal started in 2004 and the completion of a juice concentrate terminal. The port is also building a fish landing terminal.

It is worth mentioning that the State Investment Programme (1999-2010) includes the reconstruction of the Access Roads to the Port terminals. The various infrastructure improvements include the reconstruction of the major motorway connecting to the Ventspils region, the reconstruction of the Venta River crossing bridge and the construction of a new bridge. The reconstruction of the Venta River crossing bridge will include the expansion to four lanes and the transformation of the central part of the bridge in order to ensure direct railway access to the port berths under it.

2.5.1.1.1.2 The Free Port of Riga

Riga Free Port is located on both sides of the river Daugava over a length of 15 km. The total area of the Port is 7,338 ha, 2,520 of which is port land, and 4,818 ha is aquatorium. The total length of the port's wharves is 13.8 km; the maximum draught for ships at the wharves is 12.2 metres.

Riga port handles mainly general, bulk cargoes, oil products and reefer cargoes, and it caters for passenger ships. The Free Port of Riga is the main general cargo port in Latvia and ranks second in oil products transport after Ventspils. Approximately 68% of cargo turnover at Riga port involves transit freight to and from CIS.

In 2003 the volume of cargo handled in Riga Free Port increased by 20% compared to the previous year, reaching 21.7 million tons. The main cargo in the Free Port of Riga comprises containers, timber, coal, artificial fertilisers, chemical cargoes and petroleum products. In 2003 70% of all timber trans-shipped in Latvia's ports was handled in Riga Free Port. The volume of containers handled has grown by almost 10% in 2003 over the previous year reaching 132,074 TEU, approximately 97% of containers handled through all Latvia's ports. Riga Free Port was visited by 4,394 ships in 2003.

Table 2-48: Volume handled by the port of Riga (thousand tons)

	2000	2001	2002	2003	2004
Dry bulk	3,023	5,045	6,689	9,901	12,970
Liquid bulk	3,000	3,649	5,357	5,044	4,478
Containers	857	1,036	1,291	1,319	1,451
Ro-ro	112	179	360	681	482
Wood products	4,152	4,256	4,169	4,533	4,391
Other	2,206	718	242	343	219
Total	13,351	14,884	18,108	21,722	23,991

Source: Port of Riga

Two regular passenger and freight / passenger ferry lines operate from Riga Port which link Riga with Stockholm (Sweden) and Lübeck (Germany). From October 2004 a second ferry was launched on the Riga-Stockholm line.

Thirty four stevedoring companies and 32 shipping agencies operate in Riga Free Port. Major terminal operators dealing with bulk cargoes are Strek, Riga Commercial Free Port, and Baltic Containers.

A draught limitation of around eleven metres in the approach channel restricts the maximum vessel size to around 40,000 dwt. Plans for a new oil product terminal are under consideration.

2.5.1.1.1.3 The port of Liepaja/Liepaja Special Economic Zone Authority

Liepaja port handles the transshipment of timber, metals, bulk and liquid cargo, Ro/Ro, and fish. The port of Liepaja was developed in the 19th century as a commercial and military port. In 1967 it was transformed in one of the major Soviet military bases and it was closed to all commercial traffic. When the Russian navy left the port in 1994, work began to adapt the port infrastructure to commercial use. For this reason, in 1997 the *Liepaja Special Economic Zone Authority* was created in order to manage the development of the port and the large areas next to it.

From an infrastructure point of view, the port is one of the best structured in the Baltic. The port territory covers 1,182 ha, with 80 berths and 10,000 metres of quay. Maximum draught in the river navigation channel is 9.5 metres. The port offers 5500 metres of berths for dry and general cargo, 1,300 metres for liquid cargo, and 1,500 metres for fishing vessels. The port of Liepaja also offers ship building and repair facilities.

The port is part of the TEN-T networks and 2/3 of the cargo is transhipped by rail. The State public railway network has direct links with the other Baltic States, and the CIS Countries. It also provides ferry lines to Karlshamn in Sweden and Rostock in Germany.

Major terminal operators in the port specialise in grain and cereal products (Liepajas Osta LSZE JSC, Baltic Transshipment Center LSEZ Ltd., Liepaja Bulk Terminal and Transwide Services), peat moss and coal (Duna LSEZ Ltd.), and wood chips (Laskana LSEZ Ltd.). Liquid bulk cargoes are handled by DG Terminals LSEZ Ltd, Glen Oil LSEZ Ltd, Liepaja Petroleum Ltd., and Baltic Bunkering Company Ltd.

There are two shipbuilding and repair yards, SIA Tosmares Kugu Buvetava and SIA Liepajas Kugu Buves Rupnica. The port is also the permanent base of 90 fishing vessels, and the fishing enterprises in the port produce a wide variety of products as well as primary processing, cooling and refrigeration services.

The port has a total cargo handling capacity of 7.5 million tons per year. In 2003 the total cargo turnover was 4.9 million tons. Of this, the majority was outgoing cargo (4.2 million tons), while ingoing cargo amounted to 0.7 million tons. The large majority of the traffic of the port of Liepaja is general cargo, followed by oil and oil products. Approximately 70% of total cargo turnover of the port consists of transit traffic. The following table provides a summary of the cargo turnover of the port of Liepaja.

Table 2-49: Volume handled by the port of Liepaja (thousand tons)

	2000	2001	2002	2003	2004
Total cargo turnover	2,965	3,265	4,318	4,857	4,474

Source: Port of Liepaja.

The port invests considerably in new infrastructure. New large projects include the construction of a rail connection to the Northern and Western park, in order to relief one of the major bottlenecks in the port. A second important project concerns the elimination of polluting metal sediments in the navigation channel. The first phase of the project, the creation of a sarcophagus to collect all polluting sediments, has already been completed. Finally, further infrastructure projects are the construction of a new two-lane access road to the port, and the reconstruction of the Karosta turning bridge.

2.5.1.1.1.4 Other ports

There is a number of smaller ports dedicated to fishing, leisure and yachting activities. These ports engage marginally in the niche market of wood products. They are the ports of Salacgrīva, Roja, Mērsrags, Skulte, Pāvilosta, Lielupe, Engure, and the basin of Ainazi, yet to be reconstructed after destruction during World War II.

The small ports of Latvia played a role before World War II as fishing, tourism and short-sea shipping ports. During the Soviet period, the policy of discouraging people from living in coastal areas weakened their position as short sea traffic ports and they were closed to international shipping. Some of these ports remained active as fishing ports, an activity that was strongly encouraged by the Soviet Union.

After the restoration of Latvian Independence, these ports started re-establishing international contacts, first with Danish fishing ports, and later engaging in paper, firewood

and saw-timber trades (mostly the ports of Salacgrīva, Roja and Mērsrags). The smaller ports have been developed mostly thanks to the Latvian Ports Development Fund, briefly described below.

2.5.1.1.1.5 Latvian Ports and Special economic zones

The ports of Riga and Ventspils are Free Ports while the port of Liepāja is part of the Liepāja Special Economic Zone (SEZ). Companies working in the Free Ports and SEZ can receive up to 80% tax reduction, depending on investments made during the tax year. The free economic zone regulation is set according to European Union standards.

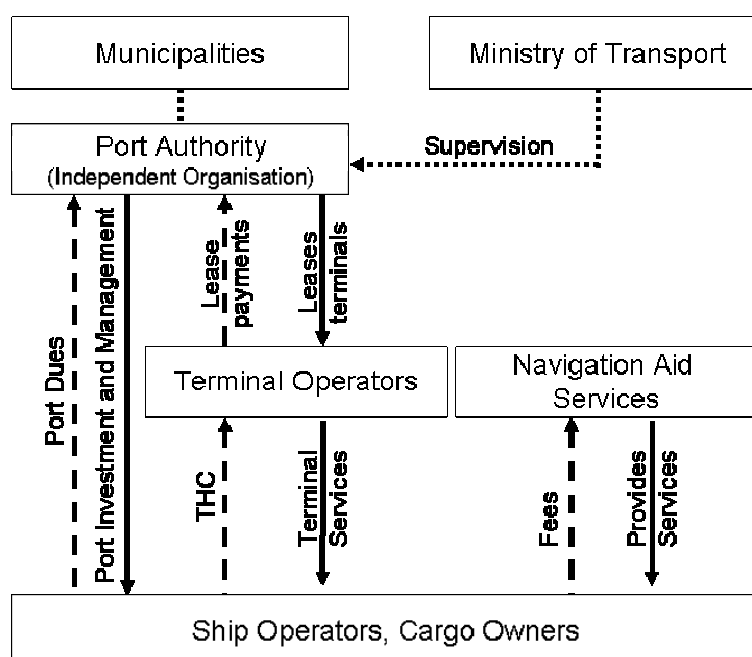
2.5.1.1.2 Governance Structure

In Latvia, port land can be owned by the State, the local government or other legal or natural persons. While the inner water area is property of the State, port land has been transferred to the relevant port authorities. This excludes State land that serves as railroad infrastructure: these areas are administered as part of the public State railroad infrastructure.

Quays at the ports of Riga, Liepāja and Ventspils are the property of the State or local government, but port superstructure and equipment (warehouses, cranes, forklifts etc.) are privately owned. Land belonging to the State or local government may be let or leased to private companies on the basis of contracts concluded with the Port Authority. In 2003, the government's wish to take a stronger position in the management of the ports of Riga and Ventspils caused some unrest between the port management and the government.

Port Authorities are institutions established by local city councils and operate under the supervision of the Ministry of Transportation. The port authorities in Latvia formulate port regulations, to be approved by the Minister of Transportation. Port regulations include the definition of the port boundaries on land and at sea; the technical capabilities of the port; requirements concerning safety and security; environmental protection; dredging; customs arrangements; and general provisions regarding ship traffic, port operations, anchorage and mooring.

Port authorities comprise a board of the port, that is the highest decision-making body, and an executive body subordinate to it and headed by the harbour master. The board of the port consists of nine members including its chairman that is an official of the local government. Four of the remaining members are representatives of the Municipality while the Ministries of Transport, Economics, Finance and Environment are represented with one member each.

Fig. 2-5: Governance structure of the ports of Latvia

The port authority administers port land, marine infrastructures such as breakwaters, moles, jetties for regulating currents, shore reinforcements and fairways, and is the legal owner of the navigational aids within the port. Quaysides in the three major ports can also belong to other legal and natural persons but are managed nevertheless by the port authority. The port authority is responsible for leasing port land and the constructions on it, for a period of up to 30 years, except when the amount of investment in the area exceeds LVL 50 million and the plan has been approved by the Latvian Port Council. It also determines port fees and lease payments, collects them and sets ceilings for port tugging and mooring. The port authority offers the following services: garbage and pollution removal, fresh water supply, fire-fighting services and berthing.

The ports in Latvia are operating as landlord ports according to the “Law on Ports”, adopted in 1994 as an umbrella law for the port sector. This model of port management provides that the port authority, acting as a non-profit entity, manages only infrastructure and looks after the policing of port operations, leaving the actual provision of port services to be the responsibility of the private sector that rents port sites from the port authority. The first stevedoring company was privatised in 1998 in Riga.

Ports in Latvia are represented at national level by the Latvian Port Council. The latter is headed by the Prime Minister and comprises senior officials of the municipalities and professionals operating in the port sector.

Port maritime services are handed over to the private sector which can set its tariffs for mooring, towage and Pilotage independently.

2.5.1.1.3 Financing of port investment and activities

Port authorities in Latvia are non-profit organisations. The financial resources at the disposal of the port authority may be used only for the maintenance and development of the port and

its infrastructure. Investment in access and defence infrastructure such as breakwaters, access channels and dredging, are also under the responsibility of the port authority.

Up to 2002, for large investments the port authority could make use of a specific port development fund. This port development fund had the purpose to *manage the accrued financial resources deriving from the activities of the Latvian ports in order to ensure the interests of the State and to raise the prestige of the ports of Latvia*³⁵. Financial decisions based on the port fund were subordinated to approval from the Cabinet, and the Fund was held and managed by the Ministry of Transport. The specific aims of the Port Development Fund were:

- The implementation of general projects in ports;
- Maintenance of State property in small ports;
- Marketing of Latvian ports in general;
- Support to the activities of the Latvian Port Council.

The financial resources of the Port Development Fund derived from:

- Contributions of port authorities;
- State allocations;
- Other sources (private donations, local authorities' contributions, etc.)

The fund was abolished in 2002 for the major ports, after pressure from port authorities. It remained operational for the smaller ports until the end of 2003. Since then, all port investments have to be carried out from the financial capabilities of the port authorities. In the future, the Government may intervene in projects related to general access, normally by land, and jointly with Cohesion Funds or European Regional Development Funds (ERDF). The following table summarises future planned investments in the ports of Latvia.

Table 2-50: Investments and subsidies in Latvian ports (thousand Euros)

Port	Period	Investment	Subsidy	Fund
Liepāja	2005-2007	11,420	8,4999	Cohesion fund
Ventspils	2005-2007	22,883	15,901	Cohesion fund
Skulte	2005-2006	1,912	1,434	ERDF
Mērsrags	2005-2006	1,684	1,263	ERDF
Salacgrīva	2006-2008	1,512	1,134	ERDF

Source: Ministry of Transport and Communications of the Republic of Latvia.

Within the framework of the Public Investment Program, the Government has provided sovereign guarantees for loans aimed at the development of infrastructure. Port authorities repay the loans.

³⁵ Latvian Law on Ports.

The port authority does not invest in handling equipment and superstructure. Investment in ship or cargo handling activities in the port is the sole responsibility of the terminal operators. The port authority is not involved in cargo-handling operations, and its intervention is limited to the provision of terminals for which lease fees are charged. The following table presents an overview of responsibilities for major Latvian ports.

Table 2-51: Port investment responsibilities for major Latvian ports.

Category	Element	Responsibility
Land development	Development of new port areas	Port Authority
Maritime infrastructure	Capital dredging	Port Authority
	Sea locks, dams & exterior breakwaters	Port Authority
	VTS/Radar	Port Authority
	Light buoys & navigational aids	Port Authority
Port infrastructure	Land reclamation	Port Authority
	Internal locks, Docks, quays, Light buoys & navigational aids, River berth & harbour basin dredging	Port Authority
Port superstructure	Pavements, Warehouses, sheds, Cranes and gantries, Link-spans, pontoons, Terminal and office buildings, Leasing/renting	Private Operators
Public utilities	Fire fighting, Police, Pollution Control	Government
Infrastructure links	Railways & metro links in area	Port Authority
	Roads in area, Canals in area	Port Authority
	Tunnels & bridges in area	Port Authority
Port maintenance	Maritime infrastructure maintenance	Port Authority
	Maintenance of port infrastructure and superstructure	Private Operators
Port services	Cargo handling	Private Operators
	Technical-nautical services	Port Authority

Source: Compiled by the authors on various sources

2.5.1.2 Public Financing in the port of Riga

2.5.1.2.1 Introduction

The Free Port of Riga Authority was entrusted in 1994 with the administration, management and development of the assets and territories of the port of Riga. Nowadays the Free Port of Riga handles 234 million tons through its 32 multipurpose berths and 300,000 TEU a year. Of the total throughput, 67% is transit cargo. Transit cargo is extremely important for the port of Riga as well as for all ports in the Baltic region.

2.5.1.2.2 Governance Structure

The Free Port of Riga is a public entity and is operating under the umbrella port law and the law on Riga Free Port. The management of the Free Port is in the hands of the Riga Port Administration which is a legal entity and acts as the Executive management unit. Executive functions in the Riga Free Port Administration are distributed in five departments: Shipping,

Accounting and Finance, Legal, Foreign Affairs and Administration, and Strategic Planning and Project Management.

The highest decision-making authority of the port management is the port's Board. Its members are appointed and dismissed in accordance to procedures established in the law on ports. The Board consists of at least of eight members, including the head of the port that is an official of the local government, and in the case of Riga is the mayor of the Riga City Council. Four of the members of the Board are appointed by the local government, while the remaining ones are appointed one each by the Ministry of Transport, the Ministry of Economy, the Ministry of Finance and the Ministry of Environmental Protection and Regional Development.

The Port of Riga operates under public and private law depending on the function it has to perform. The following functions are performed under public law:

- Determination of port fees and tariffs;
- Collection of port fees and lease (rental) payments;
- Management of security and access to the port areas;
- Monitoring of compliance with port regulations;
- Monitoring of compliance of activities of port companies with laws, regulatory enactments of the cabinet, and the by-laws of the Port Authority;
- Controlling the protection of the port territory against pollution, and ensuring the rectification of the consequences of pollution in the port, as well as participating in the rectification of the consequences of pollution at sea;
- Ensuring winter navigation in the port.

The following functions are performed under private law:

- Formulation of a draft programme for the development of the port in conformity with the approved development concept for the ports of Latvia and the general plan of the City of Riga;
- Ensuring the implementation of the programme for port development adopted by the Latvian Port Council;
- Managing the property transferred to its possession – hydrotechnic structures, fairways, navigation equipment and devices in port and in the aquatorium, as well as the aquatorium itself;
- Formulation and approval of draft estimates for the utilisation of financial resources, in accordance with the procedures prescribed by the by-laws of the Port Authority;
- Organisation of construction works in the port, as well as communications in the territory of the port in conformity with the development programme of the port;
- Research regarding the demand for and supply of the port services;
- Entering into contracts with undertakings regarding port activities , in order to ensure and improve its services;

- Managing the land of the port and of the State, or local government property located on it and transferred to the possession of the Riga Free Port Authority;
- Participation in the development of infrastructure related to the activities of the port.

2.5.1.2.3 Public Financing in the Free Port of Riga

Given its landlord port governance model, the Freeport of Riga Authority is responsible for investment in all infrastructures within the port area. This includes sea and land access infrastructure as well as terminal specific infrastructure. The port is not allowed to engage in any commercial port activities other than those established in the law on the Freeport of Riga, summarised in the previous paragraphs. Consequently, the port is not allowed to invest in equipment and superstructure.

In exceptional cases, and for those projects that concern to the wider context of the port, funding can be provided also by other public authorities. As an example, at the moment, the port authority and the City Council are engaged in the transfer of port activities away from the Riga city centre; a project with a planned investment of approximately 1 billion US Dollar. This project is financed by a combination of private investment, for the commercial activities, and public money, deriving mostly from the Free Port of Riga and to some extent from the City of Riga.

Total aggregate investment figures for 2003 amounted to LVL 2,872,438 or 4.1 million Euros. This money was mostly used for dredging and other activities like construction of berths, moles, etc. The port of Riga is a non-profit organisation and all its revenues need to be reinvested. Most of it is borrowed money comes from commercial banks at market rates. The rest derives from the reinvestment of profits deriving from port dues, leases, real estate and other minor activities. The Free Port of Riga does not receive any form of State contribution or State aid and all investments have to be financed out of its own financial capabilities.

The Free Port of Riga is exempted from corporate income tax, as a non-profit institution. As manager of State and Public properties, the Free Port of Riga does not pay real estate taxes either.

2.5.2 Work package 2

The major source of revenues of Latvian ports consists of port dues; on average, approximately 75% of total revenues. Other sources are real estate rents and leases (10%) and revenues deriving from the provision of utilities and other services such as passenger services, floating cranes, etc.

2.5.2.1 Charging practices to terminal operators at national level

Rent and concession agreements with terminal operators are negotiated privately on an individual base. Terminal operators are responsible for superstructure and equipment, although special arrangements may some times be in place. This is due to the fact that, after independence, although the majority of port equipment was either sold or privatised, some surface arrangements and buildings were transferred to the Port Authority, which leases them to the private sector.

As a reference tariff, the port of Riga charges LVL 1.6 per square metre flat rate for port areas not facing the sea, and LVL 3.9 per squared metre for port areas with quay. No specific quay dues are charged. Terminal concessions are however determined according to specific terminal areas and, as a result, the economic characteristics of the area, such as the presence of rail or road links, play a role. In 2002, the lease income constituted approximately 10% of the total revenues of the port of Riga.

2.5.2.2 Charging practices to ship operators at national level

In the ports of Latvia the following dues can be charged:

- Tonnage dues;
- Canal dues;
- Sanitary dues;
- Small-ship dues;
- Anchorage dues;
- Ice dues;
- Quayside dues;
- Freight dues;
- Pilotage fee;
- Passenger dues.

The decision on the type and level of dues is left to the port Board, with the exception of lighthouse and pilotage dues, which are collected by the Maritime Administration offices (part of the Ministry of Transport) and their agencies located in the major ports.

Maritime dues are set in US Dollar per gross ton. Pilotage dues can be subject to discounts or increases depending on the type of ship and on whether the use of the pilot can be avoided. Lighthouse dues are payable for the first 6 entrances per calendar year. Ro-ro vessels and container vessels are granted a 20% reduction. Passenger ship dues are granted a 30% reduction.

The other dues are charged by the port authority and are set on the basis of gross tonnage. Port dues represent the major source of income for the port authorities. The port of Riga, Ventspils and Liepaja charge the following types of dues:

- Tonnage dues: these are based on GT, number of calls, and type of ship. Ballast vessels receive a discount. In Liepaja in addition, vessels are given a discount also when they are loading or unloading less than 50% of their cargo in the port.
- Canal dues: are structured in the same way as tonnage dues;
- Sanitary dues: depend on the duration of the vessel's stay and the type of vessel. Discounts are given to those vessels that do not make use of the waste processing facilities of the port, as they have their own certified incinerators on board.

- Small-ship fee: vessels smaller than 200GT are subject to the small-ship dues. The dues are reduced for fishing vessels.

As a reference, the following table summarises the port dues collected in the port of Riga in the year 2003.

Table 2-52: Port dues collected by the port of Riga (thousand US Dollar), 2003

Dues	Amount
Tonnage dues	6,921
Canal dues	6,310
Sanitary dues	860
Berthing dues	2,564
Pilotage dues	4,643
Ice dues	630
Passenger toll	156
Total	22,082

Source: Port of Riga

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2.6 Lithuania

2.6.1 Work package 1

2.6.1.1 System for public financing of seaports in the Lithuania

2.6.1.1.1 Introduction

Klaipeda is the only seaport in Lithuania besides the oil terminal in Būtingė. The port is an important node in Lithuanian and international transportation systems. Its major traffics are oil and oil products, fertilisers, ro-ro cargoes and containers. In 2003 the ports of Lithuania – Klaipeda and Būtingė – handled 31.9 million tons of cargo. The following table shows a comparison with other ports in the Baltic region.

Table 2-53: Throughput in the major Baltic ports, 2003 (million tons and percentages change)

Port	Throughput	Change %
St. Petersburg	42.0	1.8
Tallinn	37.6	-0.5
Ventspils	27.3	-5.0
Riga	21.7	20
Klaipeda	21.2	7.4
Primorsk	17.7	43
Kaliningrad	12.7	28
Būtingė	10.7	76
Liepaja	4.9	13

Source: Klaipeda State Seaport Authority

2.6.1.1.1.1 The port of Klaipeda

The port of Klaipeda covers 415 ha of land with a water basin of 623 ha. The port has several oil and general cargo terminals. Vessel draft in the port is limited to around 11 metres and the maximum vessel size is thus about 40,000 dwt. However, Panamax-type vessels are accepted at the oil terminals, as the entrance of the channel has been dredged to a depth of 14.5 metres.

As far as the oil terminal is concerned, the Klaipeda State Oilport was constructed in 1959 in order to export Soviet heavy fuel oil. The oil terminal is operated by Klaipėdos Nafta Ltd. and it has an annual capacity of 7 million tons. The tank storage capacity for oil products is 350,000 cubic metres, divided into 30 storage tanks of various capacities.

Other major terminals are multipurpose ones. These are AB Klaipėda Stevedoring Company (KLASCO), Bega Stevedoring Company and Klaipėdos Terminalo Grupė, specialised in dry, liquid and packed fertilisers, metal, ferroalloys, and bulk agricultural products. Important cargoes handled in the port are also timber and wood products.

Total storage capacity for liquid cargo is 132,500 tons, while dry bulk, containers and ro-ro cargoes are stored in 780,300 square metres of uncovered storage areas and 130,428

square metres of covered storage spaces. The refrigerated storage facility can store up to 35,000 tons.

The port is linked by rail and road, with almost 70 km of rail track within the port area. The city of Klaipeda is also connected directly with the airport of Palanga. Klaipeda has several ferry connections with Germany (Kiel, Zassnits, Lübeck), Denmark (Copenhagen and Fredricia), Sweden (Karlshamn) and Poland (Gdansk). The port is also the base of small ferries to local tourist attractions.

In 2004, the port of Klaipeda handled 20.25 million tons of cargo, 67% of which was of Lithuanian origin. Transit cargo accounts for 33% of total throughput, of which 20% is directed or originated in Belarus and 5% in Russia. The relatively small percentage of transit cargo directed or originated in Russia is due to the substantial differences in the rail cargo tariffs used by the Russian railways, which discriminate between cargoes transported through Russian ports (Kaliningrad and St. Petersburg) and through the ports of other countries.

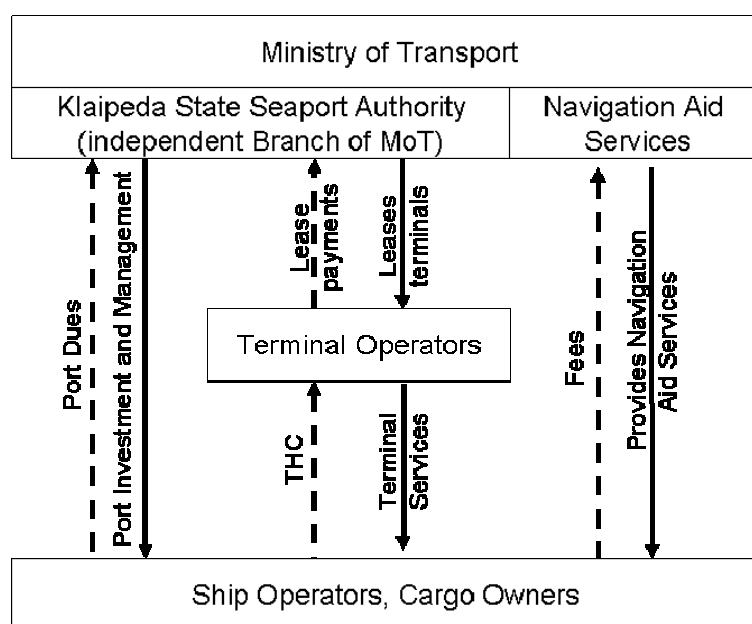
The total number of containers handled in 2004 was 174,241 TEU, representing a 47% increase over the previous year. Ferry passenger traffic increased by 15% over 2003 up to 155,749 passengers, while 14,206 passengers arrived to Klaipeda onboard cruise vessels.

2.6.1.1.1.2 The Būtingė oil terminal

Būtingė oil export / import marine terminal – close to the Lithuanian border and owned by AB Mažeikių Nafta, a subsidiary of the Yukos Group – was opened in 1999. It is connected to the Mažeikių refinery with a crude oil pipeline of an annual capacity of 13 million tons. The loading principle is an offshore loading buoy and the terminal's storage capacity is 254,000 cubic metres. The terminal is capable of loading vessels with draught up to 15.3 metres and 120,000 dwt.

2.6.1.1.2 Governance Structure

Ports in Lithuania have gone through the same type of restructuring as in the ports of other Baltic countries. The reform process has been concluded with the Law on Klaipeda State Seaport of the Republic of Lithuania, issued in 1996 (last amendment 2002). The port of Klaipeda is managed by the Klaipeda State Seaport Authority (KSSA), a Government Enterprise under the direct control of the Ministry of Transport.

Fig. 2-6: Governance structure of the ports of Klaipeda

Before the restoration of independence in 1991, there were two separate ports: a commercial sea port and a fishing port. In the territory of the port there were about 20 enterprises and organisations that belonged to different authorities.

When the independence of Lithuania was restored in 1991, the Klaipeda Port Authority was created by Decree of the Government of Lithuania and in 1992 Klaipeda obtained the status of State seaport. In 1996, the law on Klaipeda State Seaport was promulgated, stipulating that the land and water territory, the quay-walls, hydro-technical equipment, navigation routes, canals and other objects of infrastructure belong to the State and cannot be privatised.

The State has the duty of managing all port infrastructure mentioned before, and this is done via the Klaipeda State Seaport Authority, the main objective of which is to develop the port, maintain its competitiveness and increase cargo handling volumes.

The main functions of SE Klaipeda State Seaport Authority are the following:

- Coordination of the protection interventions on port land performed by port operators, and ensuring safe navigation in the port;
- Assuring the activities of Harbour Master's offices;
- Maintenance and management of the reserved territories of the port;
- Using and managing the State property in an effective manner;
- Leasing the land territory of the port;
- Collecting port dues;
- Rescue of people and ships in port waters;

- Preparing port strategic development projects, detailed plans of the port and the reserved territories of the port, organising their implementation, scientific research and promotion of the port;
- Investigate new construction projects, approve them, determine and approve mandatory technical tasks, analyse the reconstruction of existing constructions;
- Pollution prevention and elimination of consequences;
- Construction, maintenance, and development of port infrastructure;
- Maintenance of adequate depth in port waters, quays and piers;
- Organise and implement port environment protection;
- Together with the institutions of the Municipality, carry out preparatory works for the development of infrastructure in the reserved territories of the port;
- Assure supervision of the land territories that are not leased;
- Organise social services for seafarers.

Independent stevedoring companies, shipbuilding and ship-repair yards and other companies are allowed to operate in the port on the basis of lease agreements with SE Klaipeda State Seaport Authority, in accordance with the landlord port model.

2.6.1.1.3 Financing of port investment and activities at national level

With the exception of the oil terminal in Būtingė, which is a privately owned and financed installation, Klaipeda is the only port in Lithuania. Thus the financing of port investment and activities for the entire country coincides with the practice in the port of Klaipeda. A detailed description of the financing practices for port investment in the port is provided in the following section.

2.6.1.2 Public financing in the port of Klaipeda

KSSA is in principle a financially autonomous organisation, and investments in the port are based on the income of KSSA. The Law on Klaipeda State Seaport states that the income of KSSA is constituted by port dues and land rent. The responsibility of port investment lies with KSSA with the exception of terminal specific equipment/superstructure and terminal operational management that is the sole responsibility of the terminal operator.

Table 2-54: Port investment responsibilities for port of Klaipeda

<i>Category</i>	<i>Element</i>	<i>Responsibility</i>
Land development	Development of new port areas	KSSA
Maritime infrastructure	Capital dredging	KSSA
	Sea locks, dams & exterior breakwaters	KSSA
	VTs/Radar	KSSA
	Light buoys & navigational aids	Maritime Administration
Port infrastructure	Land reclamation	KSSA
	Internal locks, Docks, quays, River beds & harbour basin dredging	KSSA
Port suprastructure	Pavements, Warehouses, Terminal and office buildings	KSSA
Port superstructure	Operating equipment, Cranes and gantries Link-spans, pontoons	Private operator
Public utilities	Fire fighting, Police, Pollution Control	Government
Infrastructure links	Railways & metro links in area	Lithuanian Railways and KSSA
	Roads in area, Canals in area	KSSA and Municipality
	Tunnels & bridges in area	KSSA and Municipality
Port maintenance	Maritime infrastructure maintenance	KSSA and Maritime Administration
	Maintenance of port infrastructure and superstructure	KSSA and private operators
Port services	Cargo handling	Private Operators
	Technical-nautical services	KSSA

Source: Compiled by the authors on various sources

2.6.1.2.1 Investment in the port of Klaipeda

Since independence, the port of Klaipeda has undertaken major investment programmes. The first large implemented programme was planned right after independence. The Government of the Republic of Lithuania, by its Resolution No. 298 of 28 April 1992, approved the strategic program for reconstruction and development of the transport system of the Republic of Lithuania (principal provisions), which included the main developments of the port. After receipt of support under the EU PHARE program, in 1992-1993 the Klaipeda State Seaport development concept and The Master plan were drawn up and approved by the Government of the Republic of Lithuania³⁶.

The Government of the Republic of Lithuania, by its Resolution No. 494 of 20 June 1994, approved the program for the construction and reconstruction of Klaipeda State Seaport infrastructure objects for the period of 1994-2000. By Resolution No 1526 of 1 October 2002, the Government approved the investment program of Klaipeda State Seaport for 2002-2005. In the course of carrying out the said programs, a number of ideas of the Master plan have been implemented or are being implemented; therefore it was necessary to update the Master plan of the port following the strategic planning concept of the port.

Klaipeda State Seaport Authority is currently implementing a large investment programme, which is agreed with the Government and is going to be completed within 2005. The total

³⁶ Klaipeda State Seaport Authority

cost of the programme is estimated at LTL 368 million (i.e. approximately 107 million Euros) and it aims at the rehabilitation of the maritime access of Klaipeda port, the reconstruction of quays, and the reconstruction of road and railway access to the port. The investment programme is detailed below.

Table 2-55: Investment Programme State Seaport of Klaipeda, 2002-2005
(thousand Litass).

Investment project	Estimated cost	Estimated investments
Port entrance rehabilitation	194,261	122,408
Reconstruction and construction of quays	186,861	169,361
<i>Reconstruction of quays No 5, 6, 101-104 and development of port railways</i>	49,187	49,187
<i>Reconstruction of quay No 67</i>	5,713	3,713
<i>Reconstruction of quays No 69-70</i>	20,000	20,000
<i>Reconstruction of quays No 71-72</i>	7,615	7,615
<i>Reconstruction of quays No 82-89</i>	50,000	50,000
<i>Reconstruction of quay No 119</i>	7,700	7,700
<i>Reconstruction of quays No 27-44 (Cruise Vessel Terminal)</i>	25,000	21,500
<i>Construction of quays for fishing harbour</i>	20,000	8,000
<i>Utilities of fishing harbour</i>	1,646	1,646
Dredging	7,368	7,368
Reconstruction and development of roads and railways	35,200	35,200
<i>Reconstruction and development of railways</i>	20,000	20,000
<i>Reconstruction and development of access roads</i>	15,200	15,200
Other projects	34,065	34,065
Total (thousand Litass)	457,755	368,402
Total (thousand Euros)	132,575	106,697

Source: Klaipeda State Seaport Authority.

2.6.2 Work package 2

The major source of revenues of the port of Klaipeda is port dues (80%), followed by leases (15%) and revenues from pilotage services and minor financial transactions. Total Income for KSSA is LTL 115 million, approximately 33 million Euros in 2003³⁷.

2.6.2.1 Charging practices to terminal operators at national level

Terminal leases are set on an individual base and no standard leasing system is used. Leases are determined per terminal depending on water depth at berth, location with respect to the railway network, and quality of terminal infrastructure. Lease terms and conditions need to be approved by the Ministry of Transportation. Leases are awarded for periods from

³⁷ Klaipeda State Seaport Authority

1 to 5 years, and they are renewable. Possibilities of negotiating PPP agreements are under discussion, but the limited financial capabilities of the terminal operators in Klaipeda restrict the potential of such agreements.

2.6.2.2 Charging practices to ship operators at national level

KSSA is the authority in charge of collecting dues and charges for maritime traffic. The definition of the procedure for calculation, for the payment and application of the port dues are set by the Ministry of Transport by decree. All operators of a vessel calling at the Klaipeda State Seaport have to pay all port dues. Only foreign naval vessels and other state owned non commercial vessels are exempted from port dues by the procedure set forth by the Government. Vessels owned by the Port Authority are granted exemption from any port dues.

The port of Klaipeda charges the following types of dues:

- Vessel dues;
- Navigation dues;
- Berth dues;
- Tonnage dues;
- Sanitary dues;
- Passenger dues;
- Pilotage dues.

On arrival at the Port, the vessel's master in accordance with the International Convention on Tonnage Measurement of Ships (1969), has to submit directly or via the vessel's agent to the KSSA the following vessel's data:

- Maximum length in metres (L);
- Maximum breadth in metres (B);
- Maximum summer draught in metres (till summer water line - T);
- Gross tonnage in units (GT);
- Deadweight (DWT).

Port dues, with the exception of the tonnage dues for Ro-Ro vessels and vessels carrying only containers, and passenger dues, are calculated:

- For seagoing vessels – based on gross tonnage (GT) stated in the International Tonnage Certificate or if said document is not available, then on the basis of inscription in Lloyd's Register of Ships;
- For inland waters vessels – based on the product of the vessel's maximum length in metres (L), maximum breadth in metres (B) and maximum draught in metres (T), as per module $L \times B \times T$ (cubic metres).

2.6.2.2.1 Vessel dues

All vessels that call at the port of Klaipėda are required to pay vessel dues. Vessel dues are based on gross tonnage and the number of calls per year. They consist of a basic rate to which specific surcharges are added according to the size of the vessel and its class. The charging system differentiates between tramp and liner vessels. Among the first, different charges are set for fishing vessels, ro-ro vessels, internal water vessels and non-self-propelled floating constructions. For liner vessels, different charges are set for container vessels, container and general cargo vessels, railway ferries and ro-ro passenger vessels (calling more than once a week and 12 times a month).

Tramp vessels obtain a reduction on the basic rate and vessel specific rate if they call at the port more than 12 times a year. Liner vessels are further classified in three classes according to the number of calls, in or out, per year, respectively 1-6 times per year, 7-26 times per year and more than 27 times per year. Container vessels that call between 1-6 times are those that pay the highest dues, while ro-ro ferries and passenger vessels that call more than 27 times a year are those that pay the lowest dues.

2.6.2.2.2 Navigation dues

The navigation dues are paid by the ship operator for calling at the port of Klaipėda. They consist of a fixed sum in Litas per GT unit or per cubic metre (LxBxT). Specific rebates are applied depending on the number of calls, similarly to vessel dues.

The following vessels are granted exemption from navigation dues:

- Navy ships and State Border Control Service vessels of the Republic of Lithuania;
- Rescue and fire-fighting vessels (fire-fighting equipment is included in the list of the vessel's equipment) of the Republic of Lithuania;
- Hydrographic, training, scientific research and environmental protection vessels of the Republic of Lithuania;
- Medical aid vessels performing their direct functions;
- Sport vessels of the Republic of Lithuania;
- Other vessels (vessels carrying in or out non-commercial charity goods, and other vessels performing non-commercial functions) – subject to special decision of the Port Authority.

2.6.2.2.3 Berth dues

Berth dues are paid by the ship operator for the vessel's berthing during cargo handling operations in amount established by the Government, depending on the type of ship. The time of cargo handling operations includes the time for cargo unloading from and loading onto a vessel, cargo lashing and securing and execution of cargo documents.

Cargo vessels with GT less than 1,000 units and which, during one call, carry out cargo handling operations lasting for less than 8 hours, are granted a 50% rebate on berth dues. Berth dues are also paid by the ship operator for berthing without carrying out cargo handling operations (with permission of the Port Authority).

Rebates of 60% on berth dues are applied to Ro-Ro vessels operating on liner sailing on which call at the port of Klaipeda at least twice per week.

Rebates of 50% on berth dues is applied for fishing vessels registered in Lithuania and fishing within the exceptional economic zone of Lithuania in the Baltic Sea, fish processing vessels registered in the Republic of Lithuania carrying out processing of fish without crossing the boundaries of the exceptional economic zone of the Republic of Lithuania in the Baltic Sea; vessels registered in Lithuania and carrying passengers and cargo within Klaipeda port waters; inland water vessels registered in the Republic of Lithuania and carrying passengers and cargo within the territory of the Republic of Lithuania.

2.6.2.2.4 Tonnage dues

Tonnage dues are paid for vessels that call at the port for cargo handling operations on the base of GT and how much of the vessel is loaded or unloaded at the port.

Tonnage dues are paid for ro-ro vessels depending on the number of vehicles loaded onto / unloaded from the vessel on a unit basis, depending on the type of vehicle and whether it is loaded or not.

The following types of vessels, if registered in Lithuania are exempted from tonnage dues:

- Fishing vessels that perform fishing activities within the exceptional economic zone of Lithuania in the Baltic Sea,
- Fish processing vessels carrying out processing of fish without crossing the boundaries of the exceptional economic zone of Lithuania in the Baltic Sea,
- Vessels carrying passengers and cargo within Klaipeda Seaport,
- Inland water vessels carrying passengers and cargo within the territory of Lithuania
- Vessels calling at the port for non-commercial purpose (repair, waiting, crew replacement, replenishment of stock, etc.).

2.6.2.2.5 Sanitary dues

Sanitary dues cover delivery of all kinds of operational pollutants, which were generated from the last port of call till arrival at the port of Klaipeda and during the stay in the port. There are different charging systems for sanitary dues. The amount to be paid always depends on the time the vessel stays in port. They are calculated on the basis of the vessel's gross tonnage and depend on the cubic metre of pollutants/waste emitted.

Rebates are applied for the following type of vessels, if registered in Lithuania:

- Fishing vessels that perform fishing activities within the exceptional economic zone of Lithuania in the Baltic Sea;
- Fish processing vessels carrying out processing of fish without crossing the boundaries of the exceptional economic zone of Lithuania in the Baltic Sea;
- And vessels calling at the port for non-commercial purpose (repair, waiting, crew replacement, replenishment of stock, etc.).

The following vessels are granted exemption from sanitary dues:

- Inland water vessels registered in the Republic of Lithuania and carrying passengers and cargo within the territory of the Republic of Lithuania;
- Inland water vessels registered in the Republic of Lithuania and carrying passengers and cargo within the harbour waters;
- Vessels serving the port;
- Navy ships and State Border Control Service vessels of the Republic of Lithuania;
- Rescue and fire-fighting vessels (fire-fighting equipment is included in the list of the vessel's equipment) of the Republic of Lithuania;
- Hydrographic, training, scientific research and environmental protection vessels of the Republic of Lithuania;
- Medical aid vessels performing their direct functions;
- Sport vessels of the Republic of Lithuania;
- Other vessels (vessels carrying in or out non-commercial charity goods, and other vessels performing non-commercial functions) – subject to special decision of the Port Authority.

2.6.2.2.6 Passenger dues

All passengers (above seven years of age) embarking or disembarking in Klaipeda are charged a passenger due. The due is one US Dollar per passenger. No dues are charged for domestic traffic.

2.6.2.2.7 Pilotage dues

Pilotage dues are based on the gross tonnage of the ship. The charge is fixed and depends on whether the pilot is required within the port area or outside it. Surcharges are applied on holidays and at night.

The payment for pilotage services is calculated as follows:

- for sea-going vessel – the pilotage service rate is multiplied by gross tonnage (GT) which is indicated in the International Tonnage Certificate;
- for internal water vessel, non-self-propelled floating construction, and other vessels which do not have the documents proving its GT - the pilotage service rate is multiplied by the vessel's maximum length, the vessel's maximum breadth and the vessel's summer water line.

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2.7 Cyprus

2.7.1 Work package 1

2.7.1.1 System for public financing of seaports in Cyprus

2.7.1.1.1 Introduction

Cyprus has ten ports the most important of which are Limassol (Lemesos) and Larnaca (Larnaka). These two large multipurpose ports are the major gateway to the island. On the island there are also two industrial ports specialised in the trade of minerals – Vasiliko and Latsi (Latchi) – and five buoy berths for oil (Dhekelia, Larnaca, Visiliko, Moni and Akrotiri). The bulk terminal of Vasiliko is specialised in cement for the neighbouring factory. In addition to the previous ports, Cyprus has three smaller ports: Pafos (Paphos), the old port of Limassol, and Latsi that are used for tourism, recreation and fishing.

2.7.1.1.1.1 The port of Limassol

Limassol port is located south of the city of Limassol. At present it is the largest port in Cyprus and it serves most of the island's seaborne cargo and passenger traffic. The port handles all container traffic generated locally, transshipment, and the entire volume of grain imports. At present 90% of the country's passenger traffic is served by this port. As a container port, Limassol provides two terminals with six gantry cranes, and a total annual capacity of 600,000 TEUs. The port is currently developing a new container terminal facility with a draft of 14 meters. The first phase is scheduled to be completed by 2010. In 2003 the construction of a heavy duty paved area of 20,000 square meters began on the west side of the port, as stacking area. A new area of 40,000 square meters for stacking was created in the old container terminal on the east side of the port.

Other planned facilities include the expansion of the storage capacity of grain silos, the construction of new dolphin berths in the southern part of the basin, the upgrading of the western multi-purpose quay into a post-panamax vessel facility, as well as the extension of the existing passenger facilities and the construction of a new passenger terminal that should be completed by 2007. Also, new buildings for the Fire Department and Marine Police are under construction. Along with these major developments, the port of Limassol has undertaken minor improvements, mostly required by the EU accession, especially from a security point of view.

2.7.1.1.1.2 The port of Larnaca

The second port of the country is Larnaca, the nearest port in the South to the capital Nicosia (Lefkosa). The port of Larnaca serves both passengers and cargo and is the main port for the traffic of potatoes and other agricultural products. The port has also developed as a ro-ro port. In 2002 the Ministerial Council has decided that the port of Larnaca will be redeveloped into a passenger and cruise port. Under the recommendations of consultants hired by the Government, it was considered that the best strategy for the port system of Cyprus was to concentrate passenger traffic in Larnaca, leaving the majority of cargo traffic to be handled in Limassol. The Government has published an invitation for the submission of expressions of

interest to undertake the development of the passenger terminal in Larnaca on a Build Operate and Transfer (BOT) basis. During 2003, three firms/consortia have submitted documents for pre-selection. The contracted company is being selected and work should start soon. The new project for Larnaca provides for a staged development of the port, as a specialised passenger port, and entails the construction of new quays and the improvement of the connection of the port area with the city centre.

2.7.1.1.1.3 Other ports

The Cyprus Ports Authority's jurisdiction extends also over a number of small ports and fishing shelters, which are currently in the process of being developed further. These include the Old Port of Limassol, Paphos Harbour, and the fishing shelters of Zyghi and Latchi.

Major infrastructural developments include the redevelopment of the old port of Limassol and the completion of the construction works in the port of Latsi. As far as the first is concerned, repair works have been completed on the quays and breakwater, and the redevelopment of the land area is ongoing after a two-phase architectural competition was held in 2003. The project is expected to be completed in 2008. As far as the Latsi harbour is concerned, after the completion of the basin, the port will be managed by the Department of Fisheries and Marine Research, while the redevelopment of the Land area will be undertaken by the Port Authority in coordination with the Municipality of Polis Chrysohous.

Formally, the ports of the occupied northern part of the Island are administered by the Cyprus Ports Authority but, following the military occupation of the northern part of the island by Turkey in 1974, they have been declared by the Republic of Cyprus as prohibited and closed for all vessels since October 1974. These ports are the commercial ports of Famagusta (Ammochostos), once the largest port in Cyprus, Karovostasi, and the smaller port of Kyrenia (Keryneia).

The present report will refer essentially to the ports in the southern part of the Country, as information on the occupied north is scarce and ports there do not engage in international cargo traffic other than with Turkey. It is known, nevertheless, that no major infrastructural developments in these ports have taken place since the 1970s.

2.7.1.1.1.4 Cargo and Passenger Traffic

During 2003, 73 shipping lines included Cyprus in their international or regional itineraries, with 4,641 ships calling at Cyprus ports and a total net registered tonnage of 19.3 million tons (respectively 6% and 4% lower than the previous year). The main categories of ships that visited Cyprus were conventional ships (25%), container ships (20%), tankers (19%), ro-ro (15%) and passenger ships (11%).

In 2003, the total amount of cargo handled in the ports of Cyprus increased with 3% compared with the previous year, reaching 7.8 million tons. Half of this amount was handled by Limassol and Larnaca alone, consisting of 4.0 million tons of mostly bulk cargo and agricultural products. Container and unitised cargo showed the highest increase in 2002, with 14% and 26% respectively. On average, the increase in total cargo handled by the ports in 2003 was 5%.

The handling of container traffic reached 255,500 containers, representing a 9% increase from the previous year. There has been a great increase in container transshipment (95%)

mostly due to the crisis in Israel. In general, container penetration (import and export of Cyprus products) remained constant at 73%.

Conventional cargo-handling, mostly timber and iron, amounted to 794,600 tons with an increase of 9% from the previous year. The ports of Limassol and Larnaca handled 760,600 tons of dry-bulk cargo, with a 15% reduction of traffics. The majority of bulk cargo consists of agricultural products (soy and wheat) while 50,000 tons approximately are minerals, sands and scrap iron.

Cargo movements at the port of Vasiliko have increased by 3% to 1.5 million tons, confirming the specialisation of the port in cement, clinker and other industrial cargo. Secondary traffics included charcoal, petroleum and raw materials. Oil is handled in the specialised terminals. Volumes remained constant with respect to the previous year at approximately 2.5 million tons. Of this, 1.9 million was handled in the terminal of Larnaca, which serves the island's general needs, with a reduction of 3%, while the remaining was handled in the terminals of Dhekelia and Moni that serve the Island's power plants.

Total passenger traffic amounted to 493,900 passengers, with an increase of 3% compared to 2002. Most of this traffic called at the port of Limassol. Of these passengers, 206,600 arrived on the Island from the 25 international cruise liners that call in Cyprus. Compared to 2002, there has been an increase of 62%.

The island is also the permanent base of a large fleet of cruises sailing to Syria, Lebanon, Egypt and the Greek Islands. The total number of passengers in this segment amounts to 287,225 persons and it has experienced a decrease of 15% with respect to 2002.

2.7.1.1.2 Governance Structure

The organisation that administers all Cypriot seaports is the Cyprus Ports Authority (CPA), a public autonomous organisation under the supervision of the Ministry of Communication and Works. The CPA was established in 1973 (originally as Cyprus Ports Organisation) within the context of the World Bank port loan to Cyprus. Among the conditions of the loan was the establishment of a national port authority, with the aim of replacing previous port management arrangements which were based on non-commercial administrative procedures.

The CPA is responsible for the formulation of the policy for the Cypriot ports and their development, management and operation. The role of the CPA includes the provision of port infrastructure, equipment and services for the accommodation of ships. It is managed by a nine member-board appointed by the Council of Ministers for a term of three years.

The major tasks of the authority are:

- Port management and administration;
- The provision of infrastructure, superstructure and equipment within the port;
- Cargo handling operations;
- Passengers operations;
- Pilotage, tugging and mooring services;
- Water supply and waste disposal and other port services (contracted out);

- Garbage disposal (contracted out to private operators);
- Provision of aids to safe navigation within Cyprus territorial waters;
- Pollution prevention (with the Department of Fisheries);
- Lighthouse authority;
- Rescue services (with the Marine Police).

The CPA is entrusted with the provision of cargo handling services, which are carried out with its own workforce. As a matter of fact, in order to work in the port, port workers have to be registered at the Government Labour Office. The remuneration of port workers is determined in the collective agreements negotiated by the CPA and the Port Workers Unions.

Technical-nautical services (pilotage, tugging, mooring, VTS and navigational aids) are provided exclusively by the CPA. The CPA is also responsible for environmental protection and it safeguards safety and security within the port areas. Water supply is under the sole responsibility of the CPA. The CPA is also responsible for providing waste reception facilities, for which it subcontracts private companies.

Finally, CPA is the National Lighthouse Authority of Cyprus, owing and operating the lighthouses of Paphos, Cape Arnauti, Cavo Gata, Cavo Kiti and Cavo Greco as well as providing all other aids for the safe navigation within Cyprus waters.

In addition to the services contracted out, the following services are offered by private operators once the authorisation by CPA has been provided: shipping agents, ship chandlers, forwarding and clearing agencies, on-shore cargo movement, stevedoring, baggage porters, vessel repairs, and bunker provision.

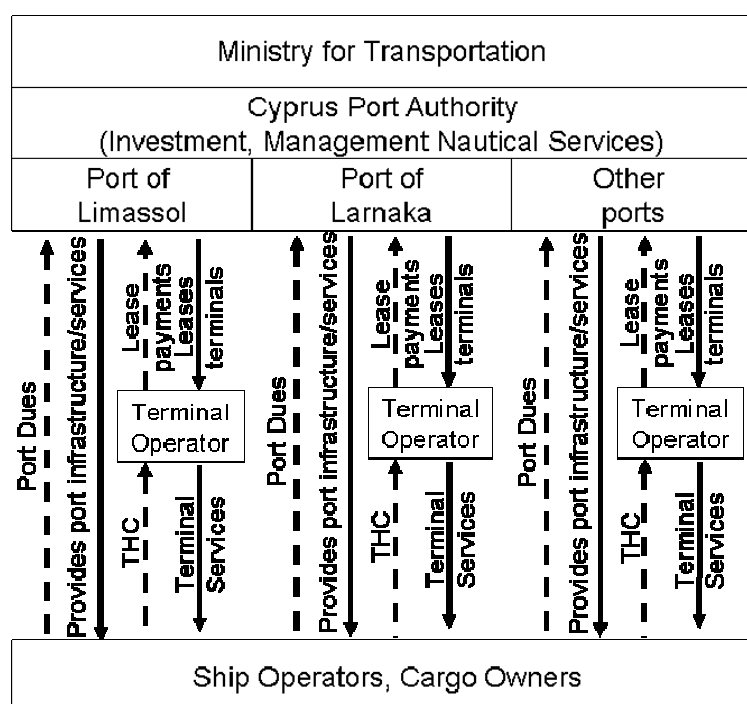
Most notably, stevedoring services, limited to the handling of cargoes on ships in port, are carried out by registered stevedores licensed by the Ministry of Labour, with the equipment of CPA. In 2003 there were 115 stevedores in the port of Limassol, including nine tally clerks, while in Larnaca there were 56, six of which tally clerks. Based on the Port Workers Law, stevedores are registered with the labour office and their employment is regulated by a collective agreement signed between their representatives and a representative of the Cyprus Shipping Association. The Labour Office is responsible for the correct implementation of the Agreement and for the operational assignment of gangs on board of ships as well as the number of stevedores to be employed daily. 40% of stevedoring activities is performed indirectly by Cyprus Shipping Association, through a sister company. Stevedoring charges are set by CPA on a cost plus basis.

On-shore cargo movements are performed by licensed porters, specialised workforce that is allowed, under licence of the Ministry of Labour, to perform cargo movements from the quay to storage areas in the port, with equipment belonging to the Licensed Porters Association. In 2003 they were 73 in the port of Limassol and 41 in Larnaca. In order to carry out all the work required at the port of Limassol, Licensed Porters employed 44 additional individuals as permanent labour/technical staff. Licensed Porters operate also the two container terminals of Limassol, limited to the movement of cargo on-shore. The remuneration for these services is fixed by the CPA on a cost basis. In other words, every year, private operators are requested to file their cost, plus a small margin, to the CPA, which issues the relative tariffs

accordingly. The normal duration of concession for on-shore cargo movement activities is one year with options of renewal. There is no maximum contract duration. There is no limitation on the number of service providers. For the provision of all services, authorisation is necessary. Not all services are subject to selection/tendering procedures.

Finally, the handling of passenger luggage in Limassol is carried out by Cyprus Shipping Association, through its sister company USC (United Stevedoring Company Ltd.), that employed 7 people in 2003 and 2 additional ones on a temporary basis. Baggage movements in the port of Larnaca are performed by Licensed Porters.

Fig. 2-7: Governance structure of the ports of Cyprus



The following services can be offered in the port once the authorisation by the CPA has been provided: shipping agents, ship chandlers, forwarding and clearing agencies, baggage porters and vessel repairs.

2.7.1.1.3 Financing of port investment and activities – General investment responsibilities

The responsibility for the provision of port infrastructure, equipment and services for berthing of ships, cargoes and passengers lies within the CPA, which is practically the only investor in the port, as it is shown in the following table. The majority of investments carried out in the past have been financed through bank loans with Governmental guarantees. Following EU accession, all future investment performed by the CPA will have to be financed via own resources. Although the CPA is as of 2004 a self-financed organisation, its budget and tariffs have to be approved by the Government and by the House of Representatives, and no change in the legal status of the CPA is envisaged in the near future.

Table 2-56: Investment responsibilities in the ports of Cyprus

Category	Element	Responsibility
Land development	Development of new port areas	CPA
Maritime infrastructure	Capital dredging	CPA
	Sea locks, dams & exterior breakwaters	CPA
	VTS/Radar	CPA
	Light buoys & navigational aids	CPA
Port infrastructure	Land reclamation/basin fills	CPA
	Internal locks, docks, quays, light buoys & navigational aids, River berth & harbour basin dredging within the port territorial waters	CPA
Port superstructure	Pavements, Warehouses, sheds, Cranes and gantries, Link-spans, pontoons, Terminal and office buildings	CPA
	Shore movement equipment, straddle carriers, forklift trucks, etc.	CPA
Public utilities	Fire fighting, Police	Government
	Pollution Control, safety, security within the port area, water supply	CPA
	Waste disposal: facilities	CPA
	Waste disposal: service	Private
	Bunkering	Private
Infrastructure links	Roads within the port area	CPA
	Tunnels & bridges within the port area	CPA
Port maintenance	Maritime infrastructure maintenance	CPA
	Maintenance of port infrastructure and superstructure	CPA
Port services	Cargo handling	CPA
	Technical-nautical services	CPA
	Stevedoring	Private
	On-shore cargo movements	Private
	Passenger baggage movements	Private

Source: Compiled by the authors on various sources

2.7.2 Work package 2

In 2003, the total revenues of CPA amounted to CYP 24.75 million, of which CYP 20.03 million were operating revenues, CYP 1.33 million revenues deriving from storage activities, CYP 1.99 million from Licenses and Royalties, CYP 1.23 million from investment income and CYP 0.18 million from other sources. CPA's operating revenues are disaggregated in the following table.

Table 2-57: Operating Revenues of Cyprus Port Authority, 2003 (Cyprus Pounds)

Source of revenue	CYP
Port charges on ships	586,743
Port charges on imports	10,888,887
Port charges on exports	620,428
Port charges on transit cargo	198,518
Port charges on passengers	1,138,509
Pilotage charges	1,468,669
Berthing charges	1,099,441
Mooring charges	43,383
Cranage charges	2,646,185
Overtime charges	898,517
Refuse collection	189,296
Charges for reefer containers	249,247
Total	20,027,823

Source: CPA

Non-operating income such as storage revenues, licenses, royalties and others are summarised in the following table.

Table 2-58: Non-Operating revenues of Cyprus Port Authority, 2003 (Cyprus Pounds).

Source of revenue	CYP
Storage	1,328,293
Licenses	1,185,912
Royalties	806,722
Financial income	1,225,459
Other income	177,143
Total	4,723,529

Source: CPA

The following tables summarise the operating and non-operating expenditures of the CPA during 2003.

Table 2-59: Operating expenditures of Cyprus Port Authority, 2003 (Cyprus Pounds).

Operating expenditure	CYP
Emoluments	6,125,000
Travelling expenses	35,443
Office expenses	38,501
Maintenance	1,232,131
Other operating expenses	1,071,430
Total	8,502,505

Source: CPA

Table 2-60: Non-operating expenditures of Cyprus Port Authority, 2003 (Cyprus Pounds).

Non-operating expenditure	CYP
Emoluments	1,907,861
Travelling expenses	17,731
Office expenses	208,363
Maintenance	11,106
Other administration expenses	229,175
Total	2,374,236

Source: CPA

2.7.2.1 Charging practices to terminal operators at national level

Terminal operator activities in Cyprus are performed by the CPA. As the port authority and the terminal operator coincide in one and the same body, no separate charges are levied for the use of the terminal and its facilities. Cargo handling charges and other terminal operation fees are levied directly from the CPA to ship operators. Ship operators are allowed to use their own equipment without any additional payment to the CPA, in the rare event that the CPA is not able to provide sufficient capacity to discharge the ship or in the case of technical failure of the CPA equipment.

As far as stevedoring, on-shore cargo movements and baggage handling are concerned, as already mentioned above, these are entrusted to the private sector that is responsible for levying its own charges. The CPA does not directly receive any contribution or royalty from the aforementioned activities, even if in principle they can be performed only under licence within the port. Stevedoring, on-shore movements and luggage handling are licensed directly by the Ministry of Labour and no payment is due to CPA for the issuing of licences.

An indirect source of revenue deriving from the stevedoring, on-shore cargo movements and baggage handling services is a royalty charged by the CPA on the delivery order. Prior to the delivery of cargo to the consignee, each shipping agent issues a delivery order. When the order is processed, a royalty on the total value of the cargo on the delivery order is transferred to the CPA. In addition to this, a surcharge is levied from the delivery order for the use of the IT system.

2.7.2.2 Charging practices to ship operators at national level

The ports of Cyprus charge dues to cargo owners and ship operators. The following types of dues are applicable in Cyprus:

1. Port Charges

- General Port Charges for vessels;
- Pilotage charges;
- Towage tariff;
- Berth dues;
- Charges for using CPA cranes;

- Charges for the collection of Garbage;
- Charges for the use of special installations at Cyprus Ports for reefer containers;
- Charges for using spreaders belonging to CPA excluding the spreaders used by CPA cranes;
- Port Authority overtime charges.

2. Customs Charges

3. Stevedoring and cargo handling charges;

- Stevedoring for dedicated container vessels;
- Stevedoring for conventional vessels;
- Stevedoring for ro-ro vessels.

4. Other General Charges

5. Agency and other fees

- Agency fees;
- Financing charges;
- Free in and free out cargoes;
- Commissions;
- Change of Crew.

6. Mooring of Tankers charges

7. Supply of Water

8. Storage charges

9. Wharfage dues

10. Charges for the collection of sludge and oil residues.

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2.8 Sweden

2.8.1 Work package 1

2.8.1.1 System for public financing of seaports in the Sweden

2.8.1.1.1 Introduction

Sweden has around 50 public seaports and a number of industry-owned wharfs, which handle nearly 95% of the Swedish foreign trade. During 2003, 29 seaports handled more than one million tons, and the five largest ones (Gothenburg, Brofjorden, Trelleborg, Luleå and Malmö) jointly accounted for 48% of the 161.5 million tonnes handled that year.

Other than containers, Gothenburg handles also large quantities of oil and cars. Brofjorden is the largest oil terminal in Sweden, located in the vicinity of the Scanraff refinery. Trelleborg sustains large passenger traffic and ro-ro operations, while Luleå is the main port of the northern region. Its main cargo is iron ore. The port of Malmö is operated by a joint venture between the ports of Malmö and Copenhagen.

Other important ports are Uddevalla, Wallhamn Varberg and Halmstad, in the West coast; Helsingborg, Ystad and Karlshamn in the South, and Oxelund, Norrköping and Stockholm in the East coast. The main cargoes handled are oil, forest products, iron ore and cars.

The following table shows the volumes handled by the main Swedish seaports.

Table 2-61: Volume handled by Swedish ports (*1000 tonnes) - 2003

Seaport	Loaded	Unloaded	Total
Gothenburg	15,534	16,822	32,356
Brofjorden	9,407	10,033	19,440
Trelleborg	5,448	5,208	10,656
Luleå	5,064	2,541	7,605
Malmö	2,896	4,319	7,215
Helsingborg	3,147	3,766	6,913
Oxelund	1,459	3,667	5,126
Stockholm	1,462	3,563	5,025
Karlshamn	2,556	2,040	4,596
Norrköping	1,592	2,520	4,112
Other seaports	24,306	34,104	58,410
Total	72,871	88,583	161,454

Source: Port of Göteborg AB

Swedish ports also support extensive passenger traffic. During 2003, more than 32 million passengers used the Swedish seaport facilities. As for container traffic, Gothenburg is the largest Swedish port. In 2003, it handled 634,000 of the 994,000 TEUs passing through the country's seaport system.

2.8.1.1.2 Governance structure

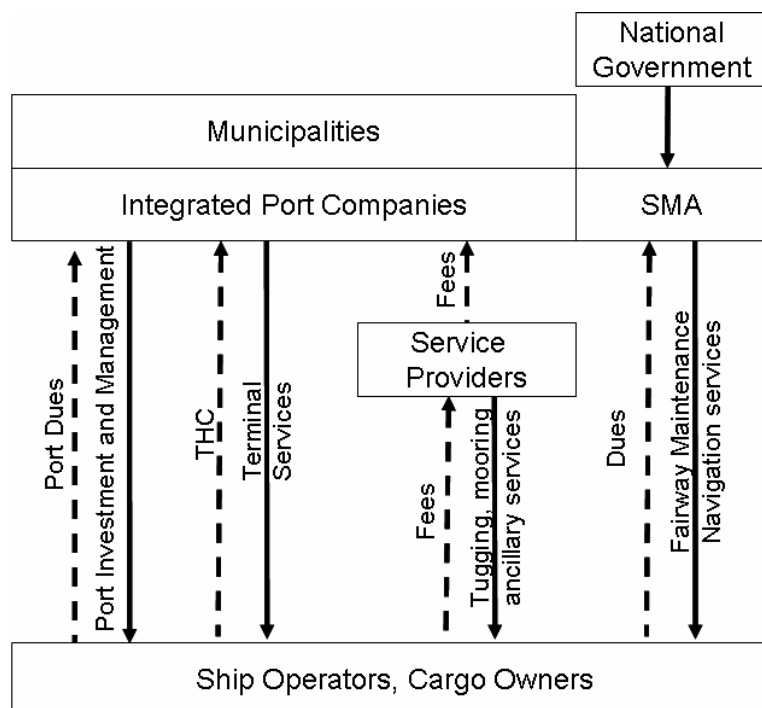
Although the Ministry of Industry, Employment and Communications is responsible for national transport policy, the country's seaport system is fairly decentralised. Sweden lacks a specific port law. Almost all of the seaports are owned by municipalities, and decisions on organisation, operations and investments are made at local level. This allows intense competition among ports whose hinterlands overlap.

National transport policies concerning the maritime sector are implemented by the Swedish Maritime Administration (SMA), a public enterprise governed by the Ministry of Industry, Employment and Communications. In practice, the SMA fulfils the role of a maritime authority. It is also responsible for the vessel traffic system, the safety and maintenance of Swedish fairways as well as for maritime search and rescue and ice breaking.

In Sweden two models of seaport governance co-exist. Around 70% of the seaports are administered by (totally or partially) municipality-owned corporations referred as “port companies”, which also provide cargo handling services. In these cases, the port company may own both the land and the facilities, own the facilities but rent the land, or rent both from the municipality. The only two cases where the port company also owns the land are Gothenburg and Trelleborg.

The following figure illustrates this governance model.

Fig. 2-8: Governance structure of the ports of Sweden



The remaining seaports are operated under a landlord model, where the port authority is part of the municipal administration and cargo handling services are provided by private companies. These are Gotland, Hudiksvall, Härnösand, Kalmar, Luleå, Lysekils, Norrtälje, Simrishamn, Skellefteå, Strömstad, Varberg, and Karlskrona.

In general, port companies operate under market conditions and do not receive any direct subsidy from the Government or the municipalities. They are subject to the Swedish Companies Act and, unlike port authorities within municipal administrations, pay taxes as any private company. However, given the close link between municipalities and port companies, it cannot be said that the latter are independent from the former. In certain cases, they still carry out activities inherited from the time they operated as municipal departments. In Gothenburg, for example, the port company is in charge of maintaining the waterways of areas where it does not operate. In this case as well as in Trelleborg, it is not clear whether the price at which the port companies acquired the land reflected market values.

In Sweden, pilotage services are exclusively provided by SMA. This service is compulsory, but exemptions can be granted in special cases. Tugging, mooring and ancillary services are provided by private operators, although they may also be provided by the port company or port authority, as in the port of Luleå, where the port authority supplies tugging services. The conditions under which private operators use the seaport's infrastructure to provide these services are negotiated with the port company or port authority.

Stevedoring services are generally carried out exclusively by the port's personnel, even in those cases where a terminal has been leased to an operator under an exclusive basis. This is the case of the port of Stockholm for ferry operators for example. The exceptions are certain specialized terminals where the operations of loading and unloading are supervised by port personnel but performed by the operator's staff. This is the case of the oil terminals at Gothenburg, for example.

New port developments must be authorised by the SMA, which will carry out the works required to alter, modify or expand existing fairways. Depending on the extent of the project, they might be directly financed by the SMA, or require co-financing from the local port company or port authority. A formal procedure to deal with the financing of large projects has not been established yet.

2.8.1.2 The System for Public Financing of Seaports in Sweden

Investments in terminal-related infrastructure are carried out by the port companies. They have the same options for financing these investments as any private company, plus the possibility of obtaining a loan directly from the municipality. In Sweden, municipalities are responsible for financing infrastructure projects of many kinds, for which their subsidiaries may obtain more favourable conditions in the financial market if the loans are guaranteed by the City. Responsibility for infrastructure maintenance lies always within the port company.

The financing of suprastructure, such as cranes and warehouses, is the exclusive responsibility of the port company or port authority, which face market conditions from financing institutions and equipment suppliers. In those cases where the assets are owned by a port company or port authority but used by private operators, they are leased under market conditions.

Investments in protection works are financed and carried out by port companies and port authorities. The responsibility for maintaining the maritime access within the port area lies with the port company/port authority. The SMA is responsible for maintaining the maritime access outside the port area, for which it collects fairways dues. However, in some cases the port company may contribute part of the costs, as it was done for the enhancement of the entrance channels to the seaport of Gothenburg.

The fact that fairway dues are the same for the whole country regardless of location implies that the SMA cross-subsidises different ports. In fact, the SMA has estimated that the average fairway infrastructure cost for the port of Trelleborg is SEK 0.10 per ton, while for the ports in the lake Mälaren is SEK 5.00 per ton and for Gothenburg SEK 0.25 per ton.

The SMA also cross-subsidises its services. For example, since pilotage fees do not cover the cost of providing the service, the gap must be covered with revenues from the other services it provides.

Access connections to surface networks such as roads and railways are responsibility of the national rail and road administrations. These agencies finance their investments with transfers from the general budget.

2.8.1.3 Infrastructure finance in the port of Gothenburg

The port of Gothenburg is located on the mouth of the river Göta, in the Swedish west coast. The seaport receives annually around 11,000 vessels. In 2003, it handled 33.3 million tonnes, of which around 53% was oil and 47% general cargo, of which over 90% is unitized, as shown in the following table.

Table 2-62: Volume handled by at Gothenburg seaport (*1000 tonnes)

Type of cargo	2002	2003
General cargo	15,336	15,867
of which unitized	14,262	14,981
Dry Bulk	152	132
Liquid Bulk	17,868	17,275
Total	32,282	32,356

Source: Port of Göteborg AB

It is worth noting that between 10% and 15% of the general cargo handled at the seaport is transhipped to other countries. Container handling amounted to 634,000 TEUs during 2003.

The land and facilities (infrastructure and suprastructure) of the Gothenburg seaport are owned by Göteborgs Hamn AB, the port company responsible for managing the port. This company acts both as a port authority and stevedoring company, and is responsible for the planning, construction and maintenance of the port facilities as well as for navigation aids and security within the seaport.

Göteborgs Hamn AB also assumes all costs related to infrastructure and suprastructure within the port. The company finances its investments via own resources and private loans, although it might receive guarantees from the Municipality if this reduces its financial costs.

Göteborgs Hamn AB is the parent company of a group comprising eight wholly-owned subsidiaries and 50% of an associated company. Among them, Scanport Insurance Ltd, a wholly-owned company which insures the seaport's risks and reinsures them on the international market.

The following table shows the main financial indicators for Göteborgs Hamn AB.

Table 2-63: Main financial indicators for Göteborgs Hamn AB (in Millions of SEK)

	2003	2002	2001	2000	1999
Net sales	1,124	1,069	1,023	1,103	1,063
Costs	1,004	945	912	969	921
Operating profit	120	125	112	135	143
Profit after net financial income	94	86	75	104	124
Balance sheet total	2,271	2,263	2,133	1,979	1,896
Investments	135	109	317	168	246

Source: Port of Göteborg AB

The breakdown of the port company's revenues and costs during 2003 is shown in the following figures.

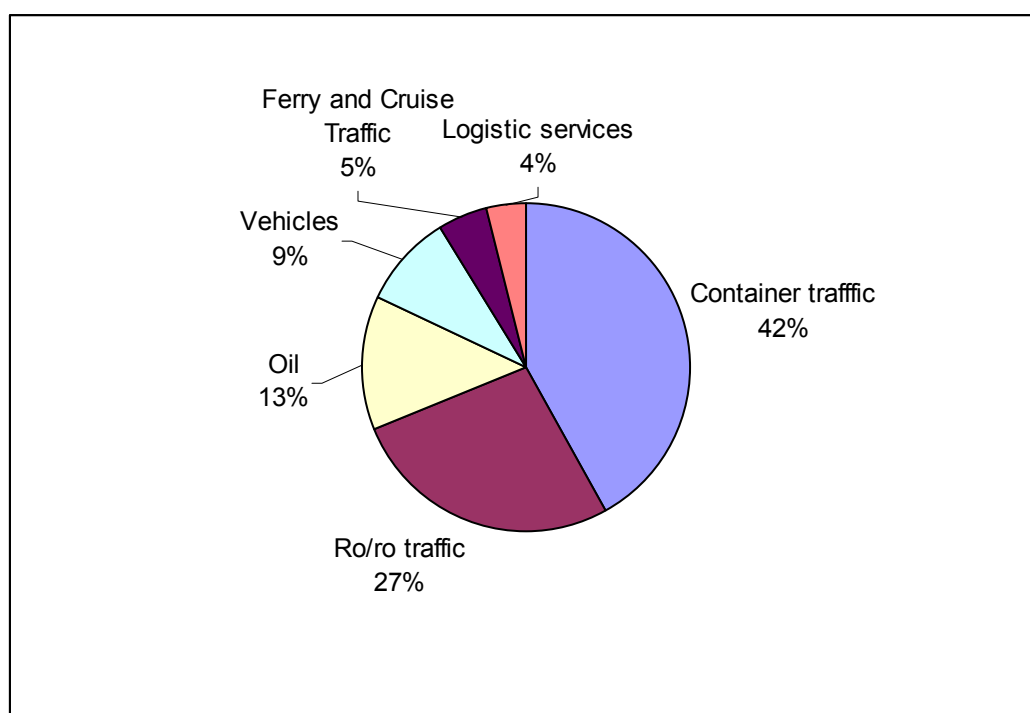
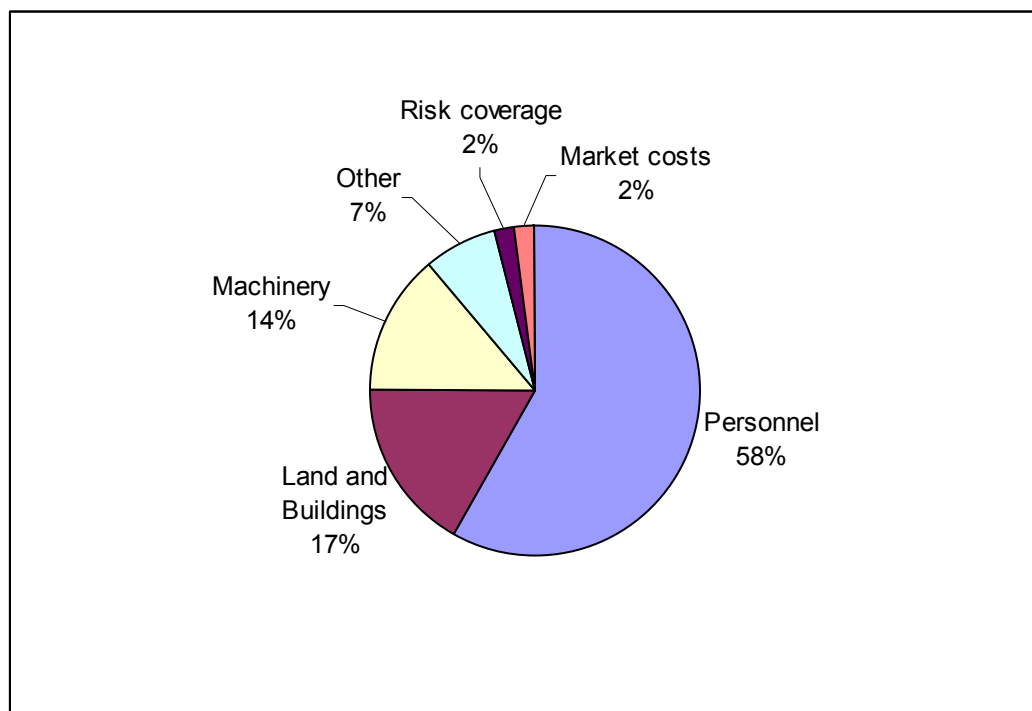
Fig. 2-9: Göteborgs Hamn AB: Breakdown of revenues 2003

Fig. 2-10: Göteborgs Hamn AB: Breakdown of costs 2003.

The shares of Göteborgs Hamn AB are 100% owned by the City of Gothenburg (Göteborgs Stad) through a wholly-owned subsidiary (Göteborgs Kommunala Förvaltnings AB). However, according to officials from the City of Gothenburg, Göteborgs Hamn AB does not receive any direct subsidy by the local, regional or central governments.

The City's credit ratings issued by Moody's and Standard & Poor's cover also its subsidiaries, but each municipal company determines what interest rate risk is acceptable according to its own circumstances. In addition, the City of Gothenburg guarantees certain loans for its subsidiaries according to its finance policy. In the particular case of Gothenburg seaport, the guarantees issued by the City in favour of Göteborgs Hamn AB amounted to SEK 977 million at the end of 2003. In this case however the port company financially compensates the City for the extra risk involved.

During 2003, two main projects were undertaken. The first one was the deepening, widening and straightening out of the fairways into the seaport of Gothenburg, run by the SMA under the wider "Safer Fairways Project". The phase I, culminated during 2004, had a cost of approximately SEK 540 million, of which Göteborgs Hamn AB contributed 28% of the total. The rest was covered by the SMA.

The second main project was the reinforcement and rebuilding of 500 metres of quayside for container ships with a draught of 13 metres, plus five hectares of the adjacent terminal. This project, part of an agreement with the SMA, has a budget of approximately SEK 400 million and is expected to be finished by the end of 2005.

In addition, in December 2004, the port company's Board of Directors authorised an investment of SEK 250 million in three super-panamax cranes. This equipment is expected to be on service in 2006.

The following table shows an overview of responsibilities within the port of Gothenburg.

Table 2-64: Port investment responsibilities for the port of Gothenburg

Category	Element	Responsibility
Land development	Development of new port areas	Integrated Port Company
Maritime infrastructure	Capital dredging	SMA
	Sea locks, dams & exterior breakwaters	Integrated Port Company
	VTS/Radar	SMA
	Light buoys & navigational aids	Integrated Port Company within the port SMA outside the port
Port infrastructure	Land reclamation	Integrated Port Company
	Internal locks, Docks, quays, Light buoys & navigational aids, River berth & harbour basin dredging	Integrated Port Company
Port superstructure	Pavements, Warehouses, sheds, Cranes and gantries, Link-spans, pontoons, Terminal and office buildings, Leasing/renting	Integrated Port Company
Public utilities	Fire fighting, Police, Pollution Control	Municipality /SMA
Infrastructure links	Railways in area	National Rail Administration
	Roads in area,	National road administration
	Canals in area	SMA
Port maintenance	Maritime infrastructure maintenance	Integrated Port Company within the port SMA outside the port
	Maintenance of port infrastructure and superstructure	Integrated Port Company
Port services	Cargo handling	Integrated Port Company
	Ancillary services	Private

Source: Compiled by the authors on various sources

2.8.2 Work package 2

2.8.2.1 Charging practises of seaports

This section describes the structure of the revenues collected to repay the funds used to develop and operate the seaport infrastructure and superstructure at a national level.

2.8.2.1.1 Charging practises related to port operators at national level

Given that in Sweden the port system is decentralized, the charging practices to operators vary from port to port. In Gothenburg, for example, terminals operated by the ferry operator Stena Line are leased from the port company until the year 2014. However, since the lots have special site-leasehold rights, the city is the contract holder. In Sweden, these site-leasehold rights can only be offered by a municipality and for a maximum of 49 years. The contract is structured in such a way that the fees are mostly paid via vessel charges.

In the same port, however, the terminal operated by the ferry line DFDS Seaways is owned by the company Göteborgs Frihamns AB, a company 50% owned by Göteborgs Hamn AB (the port company). Göteborgs Hamn AB leases the terminal from its subsidiary and leases it again to DFDS Seaways.

The land where Gothenburg's oil terminal was built is owned by the port company, although the City is the contractor. Oil companies lease their terminals for different periods of time, usually 5 years. In those cases 80% of the fees are transferred from the City to the port company. Although the conditions vary, the fees are usually paid per m².

2.8.2.1.2 Charging practises related to ship operators at national level

The fees charged to ship operators in Sweden can be broken down into fairways and pilotage dues levied by the SMA, and port dues. Fairway dues are based on the vessel's gross tonnage and they are differentiated according to the type of vessels and their sulphur and nitrogen oxide emissions.

For passenger vessels, the dues are set at SEK 1.80 per unit of gross tonnage. For cruise ships, dues will be levied as of 2006, starting at SEK 0.50 per unit of gross tonnage and increasing to SEK 1.00 from 2007 onwards. For cargo vessels, the dues are set at SEK 2.20 for oil tankers and SEK 2.05 per unit of gross tonnage for other vessels.

Vessels are offered a discount if the emissions of nitrogen oxides are below 10 grams per kWh. An additional discount will be granted if the sulphur content of bunker fuel is below 0.5% for passenger ships and below 1% for other ships. The number of calls subject to fairway dues is set at a maximum of five calls per month for passenger vessels and two calls for other types of vessels.

Pilotage dues are based on the size of the ship, computed on the basis of gross tonnage and distance piloted. Mainly for safety reasons, pilotage dues are kept fairly low by international comparison; cost recovery is approximately no more than 35%. The deficit is covered by fairway dues.

Port companies and port authorities charge fees for the services they provide, dues for infrastructure use, and fairways dues for the use of fairway infrastructure inside the port area. In the case of port companies, customers pay dues according to commercial agreements covering both fees and dues. Apart from cargo handling, these services may include storage and other services such as clearance and forwarding. Each port company has a stipulated tariff which is usually not used.

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2.9 Germany

2.9.1 The Framework situation for German ports

Port organisation

In Germany exist various types of ports that can be differentiated as follows:

- ports that belong to a Land and a municipality (for example, city states like Bremen and Hamburg)
- ports that belong to a municipality (for example, Kiel, Flensburg, Wolgast)
- ports belonging to a Land and partially to a municipality (for example, Wilhelmshaven)
- Ports belonging to a limited company (for example, Wismar, Rostock, Sassnitz/Mukran)
- Ports belonging to a private company (for example, Nordenham, various seaports in Niedersachsen like Emden, Cuxhaven)

The majority of German seaports are not independent entities – neither legal nor economical. The land and water surfaces generally belong to the territorial authorities. There are no port authorities that cover all the public functions concerning the port. These functions are carried out by various departments of territorial authorities belonging to municipal or/and Federal administration. However, the situation regarding the allocation of responsibilities has partly started to change in the last years.

In Bremen, the bremenports GmbH was founded in 2002 taking over responsibilities from the City of Bremen. Since then, bremenports manages the seaports of Bremen and Bremerhaven on behalf of the Free Hanseatic City of Bremen [municipality] (see WP Ib).

In 2004, there was the privatisation of seaports in Lower Saxony (Niedersachsen) by founding the Niedersachsen Ports GmbH und Co. KG (NPorts). This company has the legal form of a limited partnership, the State is the only partner and holds the total of the shares of the limited company that acts as the managing partner. NPorts is responsible for the operation of all seaports along the coast of Niedersachsen and became operational in January 2005.

In Hamburg the port related tasks of the State Ministry of Economic Affairs and of the Ministry of Finance have been merged and assigned to a port authority as a separate legal entity outside the City States administration. The Hamburg Port Authority (HPA) will be officially operating from 1. October 2005 (see WP Ib).

The privatisation of ports has started to change the role of the State from directly being involved into port operation to a more supervising, monitoring and steering function. It is the intention to reach more flexibility in decision making and that ports can faster react on market requirements. Furthermore, the operation of ports by a private body will achieve better economic results leading to reduction of public investments.

In general, public authorities have no special committees for port affairs, their activity is subject exclusively to general parliamentary supervision. In some institutions, e. g. in the

Chambers of Commerce and Industry, port committees were established, but they have just an advisory function.

Organisation of Port Services

In addition to the provision of basic infrastructure for the transfer of goods and passengers between sea and land, there exist a variety of services provided by different agents at port, some of them may even be located outside the port area. These services cover all activities related to the connection between port users and the port (services to ships, to cargo and to passengers).

In Germany there is a strict separation between official and market oriented services, so port authorities do not in any way provide port services, this is exclusively located in the private sector. Furthermore, the number of service providers is not limited in German ports.

The main cargo handling services are forwarding, transshipment, stevedoring, cargo inspection, storage, packaging, container stuffing and stripping, distribution to terminals of consolidated export cargo and transport of other sea freight by lighters or lorries. Like workers employed outside ports, all workers in German ports enjoy the same status under the labour and welfare laws, even workers from companies whose main activity revolves around cargo handling have no special status. The wages are fixed in the form of national collective agreements. Salaries for public service staff are fixed by legislation on a standard national basis. The Port Administration may not act according to their own discretion. One special feature of the organisation of dock labour is the so-called institution of "Gesamthafenbetrieb" (pool) that have been created and finances by individual port undertakings and supplies additional dockers when required. These dockers are also covered by permanent working conditions and regular payment. A service of the federal administration enables the dock undertakings to engage temporary personnel from those notified as being out of work at the labour exchange. With regard to training and education of port employees, this is organised by private port companies, in Hamburg and Bremen port enterprises and unions have established a joint Dockworker Training School.

Concerning the organisation of technical-nautical services for towage and mooring the private sector is responsible. Another situation exists with respect to pilotage. The pilotage on sea access channels concerns the pilot associations that are public corporations under supervision of the Federal Government. Regarding port pilotage the respective territorial authority is responsible. In Hamburg and Bremen/Bremerhaven pilotage will be done by a pilot association under the control of the local harbour master. In the ports of Mecklenburg-Vorpommern services of pilotage are based upon a contract with the Federal Government, indicating that ships are piloted from the sea pilot to the berth.

With regard to the organisation of control operations like traffic control, regulation of goods handling, environmental inspections, safety and security, in Mecklenburg-Vorpommern, Niedersachsen and Schleswig-Holstein the police forces are concerned with traffic control. The terminal operators are responsible for the regulation of handling goods, the respective Ministries of Environment for environmental inspections and the water police and port authority for safety. Regarding security the DA (Designated Authority) is responsible.

The organisation of subsidiary port services like water supply, bunkering and waste reception facilities is done in Mecklenburg-Vorpommern, Niedersachsen, Schleswig-Holstein as well as in Hamburg und Bremen by the private sector within the legal requirements.

2.9.2 Workpackage I – Public financing of seaports

2.9.2.1 Workpackage Ia – Systems for public financings

In Germany, the basic principle is applied that the public hand is responsible for the financing of the whole infrastructure, i.e. the public or general infrastructure and the user-specific infrastructure.

The public infrastructure comprises construction and maintenance of all elements of the public transportation systems within the port area and the links to the national and international hinterland connections like

- natural and artificial waterways with sea side access,
- connections to inland waterways
- port basins, including moles and locks and
- traffic safety facilities, i.e. radar, lighthouses, and other navigation aids
- roads,
- railway constructions
- and facilities for safety, flood and environment protection (incl. additional measures to protect quays against flood as well as dredging and treatment and storing of dredged material.

Additionally, the supply of transportation routes and service pipes bordering commercial used areas as well as traffic areas for rolling traffic in ferry ports belong to the public infrastructure.

The user specific or terminal-related infrastructure comprises

- the provision of land ready for building, incl. breaking up of present buildings and
- the provision of quay walls and similar constructions for the same purpose which form an integral part for the usability of a territory at navigable water.

It has to be stated that the public hand is to be differentiated in a national and a regional level ('Bundesländer'). The National or Federal Government is responsible for the land and sea-side access infrastructure (e.g. under the Federal Trunk Road Act [Bundesfernstrassengesetz]) while the Regional Governments or Federal States ('Bundesländer') are responsible for the infrastructure in the port area. The National or Federal Government does not own any commercial port does it operate any. The only port in which the Federal Government had a 50% share was the Port of Lübeck but this shareholding was returned in the beginning of 1999.

The following table gives a survey about the financing responsibilities among national government, federal states ('Bundesländer') and the private sector.

Table 2-65: Financing responsibilities among national government, federal states ('Bundesländer') and the private sector

GERMANY	Cost of investment	Cost of maintenance	Remarks
Maritime access (sea locks and channels)	100 % State outside port 100 % P.A. inside port	100 % State outside port 100 % P.A. inside port	State = Federal Government P.A. = relevant territorial authority
Coastal defence and exterior breakwaters	100 % State outside port 100 % P.A. inside port	100 % State outside port 100 % P.A. inside port	Idem
Land access (rail and road network)	100 % State outside port 100 % P.A. inside port	100 % State outside port 100 % P.A. inside port	Idem
Lights, buoys and navigational aids	100 % State outside port 100 % P.A. inside port	100 % State outside port 100 % P.A. inside port	Idem
Quays, docks and jetties	100 % P.A.	100 % P.A.	P.A. = relevant territorial authority
Superstructure	100 % Private sector	100 % Private sector	

Source: ESPO – Factual Report on the European Port Sector, Brussels, 2005

Unlike these two above explained forms of infrastructure, the suprastructure is exclusively provided and operated by private companies – without any public aid. Suprastructure investments serve the operational business of a terminal operator. Essential parts of the suprastructures are terminal paving / surface finishing, premises, Equipment for cargo handling and transportation routes and service pipes at the terminal area. Consequently, construction, financing and maintenance are economically to be allocated to the user, i.e. the terminal operator.

It is important to know that German port administrations have up to now no own budgets for infrastructure investments and also no profit-loss account. All public expenditures and incomes for the ports have to be decided by the individual parliaments. In general, these approved public means flow as direct investments into the respective port.

A specific feature is the allocation of funds out of the 'Länderfinanzausgleich' (LFA) which is a financial tool to balance out economic inequalities among the Federal States. Here, due to the fact that ports are important interfaces for the German economy, the Federal States ('Bundesländer') Bremen, Hamburg, Mecklenburg-Vorpommern, Niedersachsen and Schleswig-Holstein receive annually a total amount of 38,346,000 EUR financial support.³⁸ This payment out of the LFA is a contriution of non-coastal 'Bundesländer' to the cost of the coastal 'Bundesländer' for building and maintaining the necessary port infrastructures. The payment is scheduled for a period from 2005 to 2019 and is consequently intended to be used for important investments in ports, especially for the improvement of the economic infrastructure of seaports, for the construction and development of port installation, traffic roads and public traffic areas. The annual distribution between the coastal Federal States is determined as follows:

³⁸ Source: ESPO, Factual Report – Financing and Charging, March 2005, Brussels.

- | | |
|--------------------------|----------------|
| - Bremen | 10,737,000 EUR |
| - Hamburg | 20,963,000 EUR |
| - Mecklenburg-Vorpommern | 2,556,000 EUR |
| - Niedersachsen | 2,045,000 EUR |
| - Schleswig-Holstein | 2,045,000 EUR |

Furthermore, there is a special federal funding programme to promote intermodal transport that is also applicable in ports, whereas terminals are built by private undertakings. For example, in Hamburg some terminals got public funding out of this programme. In the Baltic a special funding programme from 2000, financed by the EU (EFRE) exists, in Schleswig-Holstein some municipal ports got public funding out of this programme.

2.9.2.2 Workpackage Ib – Public financing for Hamburg and Bremerhaven

2.9.2.2.1 Port of Hamburg

As described in WP Ia, the expenditures and incomes for the German ports have to be decided by the individual parliaments. In the case of Hamburg the Port Development Law from 1982 has been the basis for the parliamentary decisions. However, for the Port of Hamburg a significant structural change will come into force which is decisive for the in this report analysed issue of financing. As from 1. October 2005 in Hamburg the port related departments of the State Ministry of Economic and Labour and of the Ministry of Finance will be merged and assigned to the Hamburg Port Authority (HPA) as a separate legal entity outside the City States administration with own budget resources.

The three most essential aims leading to the foundation of the HPA are:

- application of business principles, i.e. market-driven and transparent regulation of port costs and port investments through direct allocation of revenues and expenses in the port with an independent budget;
- higher efficiency in organisation, i.e. customer-oriented bundling of all public tasks within a port, increased economic efficiency through optimisation of time and effort;
- higher flexibility, i.e. faster project financing and demand conform realisation of projects supported to the possibility of raising of credits.

The HPA will act the central contact partner for all questions related to the infrastructure and the commercial framework in th Port of Hamburg.

Within the former organisation structure, the act of disposal for the port area as one of the most important port development resources was within the administration for real estates as a department of the Ministry for Finance in the Federal State of Hamburg. As a result of the transfer of ownership of the port real estates to the HAP, the port authority will receive a more proactive leeway.

All real estates in the Port of Hamburg and also other assets within the port area will be subrogated to the HPA. The HPA will show on its opening balance sheet a capital asset of about 860 Mio. €. The management of port spaces and infrastructures in one hand will allow a fast and port oriented preparation and placing. Through the registration and administration

of all existing and potential free spaces it will be possible for the HPA to react on short and mid-term driven demands for port spaces while considering at the same time the strategic direction of the Port of Hamburg.

The disentanglement of the HPA out of the public budget and the introduction of an own budget will lead to an allocation of port revenues to port specific projects. Moreover, the HPA will have the alternative to borrow additional credits if necessary.

The HPA will be lead according to commercial principles, i.e. billing and annual accounts follow commercial laws. Any existing cooperations with other administration will be replaced by agreed services on a contractual basis.

Additionally to its own revenues, HPA has public means for investments in the public / general infrastructures. In the budget plan of the Free and Hanseatic City of Hamburg about 700 Mio. € have been calculated for the period between 2005 and 2009 in order to realise the necessary infrastructural needs for the further development of the Port of Hamburg. Moreover, the HPA has the right to speed up essential and short-term investments with a pre-financing through borrowing credits. Particularly this fact offers additional entrepreneurial fields of activities for the HPA.

In Hamburg, the HPA differentiates the infrastructure in user-related and in general infrastructure (similar to the definition in workpackage Ia whereby general infrastructure and public infrastructure mean the same).

The user-related infrastructure is financed by the Port Authority HPA by revenues through renting/leasing of spaces and quays to port companies while the general infrastructure is financed through port dues, public means from the City of Hamburg and expense allowances paid by public administrations.³⁹

For the requested year 2003, the budget for the port infrastructure measures in Hamburg amounted to 88 million EUR. It has to be stated that no split into the general or public infrastructure and in the terminal-related or user-specific infrastructure is available but it is assumed that these 88 million EUR refer merely to the general or public infrastructure.

2.9.2.2.2 Port of Bremerhaven

In Bremen, the company bremenports GmbH & Co. KG - founded in 2001, starting operation in 2002 - provides infrastructure services for the port group of Bremen and Bremerhaven. The company has the legal form of "GmbH & Co. KG", a limited commercial partnership with a limited liability company as the general partner, i.e.

Limited Partner:	Free Hanseatic City of Bremen (Municipality)
General partner:	bremenports Beteiligungs GmbH
Management head office:	Bremerhaven
Branch offices:	Bremen
Workforce:	approx. 420

³⁹ Expense allowances paid by public administrations means e.g. public flood protection or servicing of vessels of water police.

However, contrary to the HPA in Hamburg it must be stated that the ownership of the port spaces has remained with the Free Hanseatic City of Bremen, i.e. bremenports provides services for the Municipality (i.e. for the Federal State / Bundesland of Bremen). The port spaces continue to belong to the special assets of the Federal State of Bremen.

Being the first private Port Management Enterprise in a German universal port, the company handles all aspects of port development, expansion, building, constructing, maintenance of the infrastructure, harbour dues and promotion of the Ports of Bremen and Bremerhaven, including numerous service offers like port telematics but without functions of the harbour master and a shipping office.

An essential task of bremenports is the planning and construction within the Ports of Bremen. As all other seaports also the Ports of Bremen want to remain competitive in the international marketplace over the long term and must therefore continually adapt their capacity and infrastructure to the changing demands of the market. Construction projects and the expansion of port facilities are long term tasks requiring substantial investments.

Approval planning and project management of such complex port construction projects are part of bremenports' core expertise. The continual expansion of the ports is an assignment that necessitates a comprehensive view of the overall port complex. In addition to traditional construction engineering, this increasingly also includes tasks such as:

- port master planning and development
- port strategy
- approval planning
- technical and environmental research
- project management
- environmental management and compensation measures
- investment financing

Alongside other plans aimed at improving port access and functionality, port development currently focuses on major projects such as expansion of the Container-Terminal and Kaiserschleuse lock in Bremerhaven, and the development of an Automobile Transshipment Master Plan.

The clear responsibilities and lean structures ensure a uniform procedure at both locations thus providing flexibility, effectiveness and transparency. As a Private-Sector organisation acting as a management company on behalf of the Free Hanseatic City of Bremen, bremenports markets their services outside Bremen state borders, for example in the construction and operation of the new deepwater port in Wilhelmshaven, in which several German Federal States are involved.

A further crucial task for the bremenports is the building and maintenance of the port infrastructure.

Harbours consist of water deep enough for ocean-going vessels, quays and transport areas, plus the related plant and equipment. Together, these make up the port infrastructure.

In Bremen / Bremerhaven this includes:

- 49 km of quays 75 km roads and canals
- 250 km port railway tracks
- 65 bridges
- 166 buildings
- 6 locks
- 10 km dykes

The Bremen seaports have also their own railway with more than 250 kilometres of track. Back in the 19th century, Europahafen in the City of Bremen was the first port in the world to have its own railway terminal. Today the rail facilities await a number of improvements and modifications, including the dismantling of tracks which are no longer needed.

For the near future, bremenports is also planning the construction of new rail facilities in the following areas:

- "Overseas City" (by 2010)
- Cargo consolidation and distribution park (GVZ)
- Hemelingen industrial park
- Container-Terminal 4

Additionally, the system operation and maintenance have to be guaranteed as part of the tasks of the new port authority. Since many of the port facilities have to be in operation around the clock, bremenports employees operate and supervise six locks, eleven moveable bridges, two flood barriers, numerous pumps and water valves, two small and three large firefighting systems, two electrical power and lighting grids, telecommunications and technical equipment for the various buildings. These and other facilities must be regularly inspected, maintained and repaired, which calls for a variety of special-purpose vehicles and floating equipment.

In order to maintain port facilities at a high technical and cost-effective level, bremenports ensures ongoing modernization of important components of the port infrastructure. One of the main items in that respect are the locks which enable ships to reach the port regardless of tidal conditions.

Some important measures recently completed:

- Upgrade of the communication and signal networks for supervision and remote operation of locks and bridges,
- Modernization of the power supply and control equipment in the areas around Nordschleuse lock and the swing bridge in Bremerhaven,
- Overhaul of lock gates (Nordschleuse, Fischereihafenschleuse),
- Overhaul of the undercarriage for the outer gates of the Oslebshauser lock.

As described in WP Ia, the expenditures and incomes for the German ports have to be decided by the individual parliaments. In the case of Bremen, the Constitution (Art. 38), the

relevant Ministries and the Bremen budget law are the basis for the parliamentary decisions.

Again here, the port infrastructure is to be differentiated in general or public infrastructure and user-related infrastructure – following the same definition as under workpackage Ia and as given in the chapter about the Port of Hamburg. The public infrastructure is considered as part of the general development of industrial or commercial areas – similar to the development of commercial areas outside ports.

The budget for general port infrastructure ran up to a budget of 57.7 million € in 2003 - financed out of the budget of the Federal State of Bremen. Public investments in quay walls amounted to 58,6 million € in 2003 – representing 100% of the financing of quay walls. No public investments were made in land reclaiming in 2003.

2.9.3 Charging practises of seaports

2.9.3.1 Workpackage IIa – Charging practises related to port operators

According to the German law, the Federal States are free to decide about the charging for the use of the public / general infrastructure and the terminal-related infrastructure.

Given the demand elasticity and the exchangeability of ports, appropriate investments should be applied by the Federal States which lead to cost coverage by market oriented port dues.

With respect to the calculation of cost coverage it has to be taken into account that several sovereign duties are not to be included in a profit-loss account of the public hand – and therefore not allocated to dues that are to be paid by private companies. As described already before, the general or public infrastructure is part of the general development of industrial or commercial areas – like the development of commercial areas outside ports. Additionally, it has to be considered that the share of industry in a port area differs from port to port. Rents paid by industry companies might lead to compensations of losses out of the actual port business. Hence, charging practises refer to terminal-related infrastructures as they are directly used by terminal operators for carrying their business.

With regard to rents and leases of land space/areas and quay walls the areas are in general made available by the port owners in Bremen, Schleswig-Holstein, Mecklenburg-Vorpommern and Niedersachsen on a long-term contractual basis.

In the port of Hamburg the land lease contracts last about 30 years and the sites and quay will be rented from the city. The level of rent is determined for 5 years, and depends on the quality of the site (water interface, water depth, rail connection) or the quality of the quay walls. Similar to Hamburg, the negotiation on rents takes place also in Bremerhaven every five year.

In the ports of Schleswig-Holstein, Mecklenburg-Vorpommern, Niedersachsen the investments into port superstructure are generally done by the private sector. In Schleswig-Holstein the ports themselves could also be owner of parts of the superstructure, e.g. of passenger terminals or handling equipment. Based on market prices the terminal offices are leased out to carriers, forwarders, agents, authorities etc. The rent for cranes is based on tariffs. The port owner provides IT infrastructure against payment.

Terminal offices leased out to based on market prices, rent for cranes is per tariff. Port owner provides IT infrastructure, e.g. to port authority against payment. In general, the port raises charges for use of harbour by ships (Harbour Tariff) and use of facilities administrated by port owner (Quay tariff).

2.9.3.2 Workpackage IIa – Charging practises related to vessel operators

According to the user-pay-principle, port charges are to be paid by ship operators for using the terminal infrastructure, i.e. quay and jetties (demurrage for mooring and berthing) and port dues are to be paid for using the access infrastructure of the port, e.g. navigational aids, port access channels and turning basins.

Port dues are the charges on vessels for the use of the access infrastructure of a port. Responsible for the port dues is the respective territorial authority which means that the dues are fixed by regulations. In general this charge is based on gross tonnage and demurrage. More specific the criteria needed for the determination of dues include gross tonnage, in case of passenger ships sometimes additionally the number of passengers embarking/disembarking, geographical area covered on voyage and the type of freight. Except Bremen and Hamburg, the wharfage – the weight of goods loaded and unloaded – is used for calculating the charge.

In case the turnaround time of a ship exceed the number of lay days covered by the port due or no gross tonnage charge is required under the regulations, the demurrage is charged, referring to the number of lay days and the gross tonnage of seagoing vessels, the carrying capacity of inland waterway vessels or the area of water taken up by floats and floating equipment. Furthermore, there exist several additional port-related dues like harbour pilotage fee, anchorage for the use of public anchoring facilities, fees for making special use of areas of land or water dedicated to public traffic, fee for the use of public storage areas on land, bridge and lock tolls.

In Hamburg, the port dues are determined by a regulation of the Hamburg government. These dues are not negotiable, but under certain conditions the regulation allows rebates to cruise liners and cargo vessels sailing on regular liner routes, depending on the number of calls.

Similar regulations for tariff rebates apply to Bremen/Bremerhaven and Schleswig-Holstein. This was also true in Niedersachsen, before the State-owned ports were privatised. After the privatisation these ports receive the revenues from land leases and port charges as income, the ports act – like any private enterprise – financially autonomously on the basis of the respective commercial accounting rules.

Furthermore, in ports of Schleswig-Holstein and Niedersachsen rebates can be guaranteed for environmental or safety purposes on waste disposal dues relevant for vessels which have suitable technical equipment for separation and/or prevention of waste.

2.10 United Kingdom

2.10.1 Introduction and methodology

Most of the major seaports in the United Kingdom have been transferred from public to private ownership over the last 20 years or so. However, the UK-specific trust port model also exists in some ports and port areas, often alongside private ports, and this can lead to some confusion. Trust ports are autonomous self-financing user-oriented bodies, but should not be confused with public ports, which they are not.

In total five ports (or rather port areas) have been surveyed for this study, these being London, Liverpool, Felixstowe, Southampton, and Grimsby & Immingham. These five ports are all in the top-7 UK port list by tonnage, and they include the most significant container ports in the UK.

Major difficulties were experienced in obtaining the necessary financial data from the UK ports surveyed. Private ports refused to disaggregate their income data by the categories required. It was therefore not possible to break down incomes for each port. However, more success was achieved in terms of analysing expenditure for each the different investment categories, though again there are some limitations as to this information, and some aggregation has been necessary.

Of course, any analysis of public funding for major ports in the UK is rather eased somewhat by the simple fact that there is no government funding for such ports in the UK, and therefore all expenditure has to be privately financed and must therefore be fully recovered from user charges. This factor tends to diminish the need (if it were possible) for disaggregation of port revenues.

With regard to methodology, the sources of data presented here are as follows:

- Spreadsheet and covering letter sent to ports, showing the categories of expenditure and income required to be broken down;
- FAME – Financial Analysis Made Easy, for access to company accounts (more useful for individual terminal operators than ports per se);
- Analysis of each port company's published financial accounts (as noted above these tend to be consolidated accounts and for larger port groups common to the UK they do not separate income and expense by port);
- Interviews with UK Major Ports Group (UKMPG) and British Ports Association (BPA) – a request was made for support from both groups, which was readily forthcoming, to request their port members to supply information. However, in practice the ports refused to provide sufficiently detailed information;
- Direct contact with ports (private and trust) – this allowed the researchers to obtain some more detailed information on capital expenditure for each port for 2003, though again the data on income was not readily forthcoming;
- Direct contact with other agencies: Highways Agency; Strategic Rail Authority; Trinity House (lighthouses and aids to navigation);

- Fairplay Ports Database, for port technical data on facilities, quays etc.;
- Various industry journals, including Lloyds List, Containerisation International, and Cargo Systems etc. – the latter especially useful for obtaining details of previous port development schemes and investments as well as details of future expansion plans.

The structure of this UK major ports analysis follows on from the structure and series of questions issued by Erasmus University as part of this study in its evaluation of port financing and charging practices in other countries. This approach follows a logical sequence of questions as follows:

Objective 1: *To define the port under analysis and its characteristics*

Objective 2: *To understand the governance structure of the port*

Objective 3: *To identify the financial responsibilities for investment in the seaport*

Objective 4: *To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market*

Objective 5: *To identify specific financial figures for the investment carried out by the port authority in the port*

Objective 6: *To identify specific financial figures for the investment carried out by the public sector in the port*

Objective 7: *To identify forms of public aid in the ports sector*

Objective 8: *To investigate the structure of the revenues collected to repay the funds*

A conclusions section provides a summary of the findings based on the above structured approach. Annex I provides a list of contacts and interviewees. Annex II contains a more comprehensive list of the many privately owned wharves located along the River Thames in London.

2.10.2 Southampton

2.10.2.1 Characteristics of the port

Objective: To define the port under analysis and its characteristics

a) Description of the area for which the port is responsible

Southampton is located close to the English Channel, 123km south of London. Facilities comprise 2 dock basins and extensive river quays providing a total berthage in excess of 12km. Accommodation exists for a wide variety of vessels including bulk, Ro-Ro, container, passenger and general cargo ships. Tanker facilities are available at the Fawley Oil Terminal (operated by Esso) and at BP Oil, Hamble. Southampton is recognised as the main UK port for passenger liners and is home to Cunard's flagship "Queen Mary 2" and P&O Cruise's entire UK cruise fleet. The largest vessel handled is the "Hellas Grand", 422,000dwt. At the Fawley Shell refinery, size of vessel is restricted to max draft, and this facility frequently handles part laden VLCCs and ULCCs.

The seaward limit of the port is bounded by a line joining Stansore Point (50°47'N 001°20'W) and Egypt Point, 1.5nm SE, then along the N limit of Cowes Harbour and then by a line joining Old Castle Point (50°46'N 001°16'W) and a position on the mainland 0.05nm SE of Hillhead Beacon. The northern limits lie at Woodmill (50°46'N 001°22'W) on River Itchen and at Redbridge (50°55'N 001°28'W) on the River Test, but excluding the River Hamble.

The main approach to Southampton Water lies through the Western Approach Channel, which can be entered either from the west part of the Solent or from the east part of the Solent. It can also be approached through north Channel, a subsidiary channel for light draft vessels. Channels up Southampton Water to The Docks are dredged to a depth of 12.6m.

b) Type of commodities handled

Main cargoes include oil products, trade cars, containers, plus passengers from cruise ships and local ferries (Isle of Wight and Hythe).

c) Size and type of infrastructures and terminals

Facilities comprise 2 dock basins and extensive river quays providing a total berthage in excess of 12km. Accommodation exists for a wide variety of vessels including bulk, Ro-Ro, container, passenger and general cargo ships. The container terminal has some 1,350m quay length, 72.8 ha of storage area, with 11 post-Panamax cranes and 91 straddle carriers. Tanker facilities are available at the Fawley Oil Terminal (operated by Esso) and at BP Oil, Hamble. There are two passenger terminals, both having been extensively refurbished over recent years.

d) Annual throughput

Total cargo handled in 2003 amounted to 35.8 million tonnes, equivalent to 6.4% of UK port traffic and making Southampton the UK's fifth largest port in terms of tonnage. Oil products accounted for 24.3 million tonnes (68%), with containers accounting for 7.3 million tonnes (20%) – just under 1.4 million teu (849,000 units) were handled in 2003. Southampton is the UK's fifth largest oil port (9.8% share) and second largest container port after Felixstowe (18.7% share).

In addition, almost 700,000 trade cars were handled, making Southampton the largest trade car port in the UK. Southampton is also the largest cruise ship port in the UK, with 434,000 cruise passengers (62% of UK cruise ship passengers). The local Red Funnel ferry links between Southampton and the Isle of Wight transported 2.8 million passengers, 430,000 cars, and 85,000 trailers in 2003.

e) Operating under private or public law

Southampton is a privately owned port, and subject to requirements laid down by the Companies Act and other legislation governing general business activities. However, the following Acts of Parliament governs procedure with respect to port operations:

- Harbours, Docks and Piers Clause Act 1847
- Merchant Shipping Act 1894
- Dangerous Vessel Act 1985
- Dangerous Substances in Harbour Areas Regulations 1987

- Merchant Shipping (Tankers)(EEC Requirements) Regulations 1981
- Merchant Shipping and Marine Safety Act 1997
- Merchant Shipping (Oil Pollution Preparedness, Response and Co-operations Convention) Regulations 1998
- Pilotage Act 1987
- Merchant Shipping Act 1984 (Local Lighthouse Authority)
- Prevention of Oil Pollution Act 1971
- Merchant Shipping (Port Waste Reception Facilities) Regulations 1997
- Food and Environment Act 1985 Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988
- Docks Regulation 1988
- Health and Safety at Work Act 1974
- International Convention for the Prevention of Pollution from Ships 1973 as Modified by its Protocol 1978 (MARPOL 73/78)
- Port Marine Safety Code
- International Ship and Port Facility Security Code (ISPS)

ABP is the 'Competent Harbour Authority' and as such are responsible for safety and navigation within the port's area of jurisdiction, including provision of Vessel Traffic Services (VTS) and Pilotage, as well as maintaining safe navigation channels.

f) Port authority ownership

The Port of Southampton is owned by Associated British Ports Holdings plc (ABP), which is a public limited company listed on the London Stock Exchange, and a FTSE 250 company with a market capitalisation of around €2.16 billion. ABP owns a total of 21 UK ports, together with other transport-related businesses that constitute the ABPH Group. As a whole, ABP ports handle approximately a quarter of the UK's entire seaborne trade.

2.10.2.2 Governance structure of the port under analysis

Objective: To understand the governance structure of the port

a) Roles of the Ministry, city and port authority

The Department for Transport (DfT) sets policy for ports in the UK; however, there is no financial support available from national government for port developments. National government interest is more associated with the enforcement of regulatory, health and safety, and security matters (e.g. via government agencies such as the Health & Safety Executive, Maritime & Coastguard Agency, and HM Customs & Excise). Within the port, ABP also has statutory responsibilities as the competent harbour authority, most of which were transferred from its state-owned predecessor at the time of privatisation in 1983.

Local government (Southampton City Council and Hampshire County Council) provide no financial support for port investments, and have no involvement in the port in any operational or strategic management respects. The local authorities do nevertheless have a role in terms of planning matters, although for major planning deliberations the DfT has a more prominent role (e.g. the Minister deciding on largescale planning applications, such as the Dibden Bay project, which was refused after a lengthy public inquiry).

With respect to land access, ABP works with the local authorities and national agencies (DfT Highways Agency, as well as the Strategic Rail Authority) to ensure adequate connections are provided and maintained to/from the port.

b) Boundaries between port and maritime administrations

ABP is responsible for all investments (infrastructure and superstructure) made within the port area. The UK government has no specific or comprehensive 'maritime administration' as such, with shipping and port matters subsumed within DfT.

c) Port governance model

ABP is essentially a private port owner/port authority employing a landlord approach with regard to port operations. Thus, most of the terminal operations and activities within the port are undertaken by other privately-owned entities under contract arrangements with ABP as landlord. At the major container terminal in Southampton, ABP has a 49% share in the operating company, Southampton Container Terminals (SCT), with the remaining shares owned by P&O Ports.

d) Roles of the public and private sectors within the port

National government agencies are primarily involved in safety (Health & Safety Executive, Maritime & Coastguard Agency etc.) and security matters (HM Customs & Excise). ABP and its private sector partners/leaseholders are responsible for the day to day activities in the port, as well as for long term investments, including dredging.

e) Public/private nature of marine services

All port services including pilotage and towage are provided by private actors and these depend entirely on private investment.

2.10.2.3 Investment responsibilities: Body or institution financially responsible for the different types of investment and their maintenance

Objective: To identify the financial responsibilities for investment in the seaport

a) Access infrastructure

- i) By sea access channels, fairways, dredging works, protection works, breakwaters, navigation aids etc. are provided by ABP at its expense.
- ii) By land road connections, rail connections, inland waterway connections within the port area are the responsibility of ABP. Road and rail connections outside the port area are the responsibility of national government entities (Highways Agency/local authorities and Strategic Rail Authority). However, the policy of DfT in instances where increasing port traffic flows require new and/or improved landside infrastructure

investments, is that such investments should at least partly be met by the private port owners.

b) Terminal-related infrastructure

Civil works within the port area that allow the supply of services to ships and cargoes in the context of specific terminal or operator – e.g. quays, jetties, finger piers, specific mooring assets etc. are all the responsibility of the private port owner ABP and/or its private tenants.

c) Terminal superstructure and equipment

Surface arrangements, paving and buildings, mobile and fixed equipment – paving/surfacing, terminal lighting, parking areas, gates and fences, sheds, warehouses and stacking areas, tank farms and silos, offices, repair shops, other buildings, cranes, straddle carriers, vehicles, other cargo handling equipment – are all for the account of the private port owner ABP and/or its private tenants.

2.10.2.4 Financing structure

Objective: To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market

a) The financing body

100% of ABP's finance is private capital. Finance is primarily obtained from shareholders funds, from internal sources, and via loans from commercial banks.

b) The party that contracts the debt

ABP contracts debt for its own port infrastructure investments. Many of ABP's port tenants also make their own investments, again using private capital.

c) Repayment conditions

Not applicable.

d) Are repayment conditions similar to market ones?

Repayment conditions are based on commercial lending market requirements.

e) Are these conditions similar to those given to other infrastructure projects?

Conditions will be similar to other private infrastructure projects. However, as ABP owns 21 ports its potential to achieve economies of scale (e.g. in securing finance and in making capital investments) will tend to be greater than for an individual port, and this is a characteristic of the UK ports industry which is now highly concentrated.

2.10.2.5 Specific financial figure for types of investment and for which the financial responsibility falls on the port authority

Objective: To identify specific financial figures for the investment carried out by the port authority in the port

ABP publishes consolidated accounts for all its 21 ports but refuses to provide any disaggregated financial information on any individual port. It is therefore not possible to identify payments received by the port of Southampton from specific individual terminals or from shipping operators; quite simply, the multitude of port tenants and the confidentiality of this data preclude such detailed analysis. However, the basic principle remains, that port investments at Southampton are made by the private sector, and paid for by the private sector with private capital.

Information was nevertheless obtained regarding specific investments made in the port of Southampton during 2003 by ABP and its subsidiaries. Identified investments for the year totalled €70.7 million, of which an estimated €36 million (51%) was for terminal related infrastructures, €32 million (45%) was for superstructures, and €2.7 million (4%) was for access infrastructures.

2.10.2.6 Specific financial figure for types of investment and for which the financial responsibility falls on a public body other than the port authority

Objective: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any public body in the port during 2003.

2.10.2.7 Financial aid received by the port authority from national, regional, local authorities

Objective: To identify forms of public aid in the ports sector

- a) Port of Southampton receives no compensation for operating losses.
- b) There was no provision of capital by public bodies.
- c) There were no non-refundable grants or loans on privileged terms provided by public bodies.
- d) There was no foregoing of profits or foregoing the recovery of sums due.
- e) Foregoing a normal return on public funds used does not apply.
- f) There was no compensation for financial burdens imposed by public agencies.
- g) There was no reduction in or exemption from general forms or levels of tax relief on profit, investment or property income taxes, VAT, local taxes, etc.

2.10.2.8 Sources of revenue of the port authority

Objective: To investigate the structure of the revenues collected to repay the funds

Port revenues, including port dues, leases, terminal handling charges, and other service charges are commercially confidential and will not be disclosed by ABP. However, as all investments in the port are privately funded, and as ABP makes significant profits from its port assets, it is evident that revenues must be sufficient to repay invested funds.

In 2003 ABP (UK ports & transport) as a whole had a turnover of €503 million and achieved an operating profit (before goodwill and exceptional items) of €219 million.

2.10.3 Liverpool

2.10.3.1 Characteristics of the port

Objective: To define the port under analysis and its characteristics

a) Description of the area for which the port is responsible

Liverpool is located at the mouth of the River Mersey on the west coast of England. The port has extensive cargo handling facilities within its numerous docks and basins. The port possesses over 47km of quayage which provide accommodation for tankers, general cargo, bulk cargo, container and Ro-Ro vessels. Sub-ports include Birkenhead, directly opposite Liverpool on the River Mersey, and Tranmere Oil Terminal which lies further upriver from the main port.

The largest vessel handled, in the river was LOA 346m, draft 14.8m, beam 57m, and 322,912dwt. Largest ship handled in dock is LOA 292m, beam 36.66m, draft 12.8m

The port limits include the River Mersey and approaches from a line between Hilbre Point and Formby Point, extending approx 15nm seaward and up river to Warrington Bridge, excluding any waters belonging to the port of Manchester.

The port is entered through Queen's Channel and Crosby Channel, the approach to which lies through Liverpool Bay. The channel is encumbered by banks on either side which extend up to 8nm offshore, but these dangers and the channel are well marked by floating lighted sea marks and lightbuoys. The approach to the Queen's Channel is marked by the Bar Lightfloat, moored 3nm WNW of the entrance to the channel.

Pilotage is compulsory for all vessels including a vessel under tow where the length of tug and tow exceeds 82m navigating within the Port with some exceptions. There is good anchorage outside River Mersey in the open roadstead of Liverpool Bay. The tidal range and flow is 8.3m MHWS. The port access channel is kept constantly dredged; at LWST there is about 8.53m of water in the channel. Channels are constantly surveyed and dredged.

b) Type of commodities handled

Main cargoes include oil products, containers, general and dry-bulk, RoRo trailers and ferry passengers, plus passengers from cruise ships and local ferries (cross-Mersey).

c) Size and type of infrastructures and terminals

The major port facility is Royal Seaforth Dock which offers 1,098m of quay and 9 container cranes (6 x 40t, 2 x 35t and 1 x 30t). This is supplemented by various dry cargo and bulk handling facilities plus RoRo terminals for the Irish Sea trades, and passenger terminals.

Across the river, Birkenhead offers an extensive dock system handling general cargo and bulk commodities. A major new RoRo terminal has been built outside the locks at Birkenhead for Irish Sea RoRo ferry services, these also carrying passengers and cars.

At Tranmere there are facilities for the handling of bulk oil. At Bromborough Wharf, 6km south east of Birkenhead on the River Mersey, there are 2 berths with a total length of 230m for handling dry bulks, forest products, general cargo and heavy lift project cargo.

Liverpool Freeport zone is a warehouse community located in 323ha of the port including specialist forest products warehousing and metal storage, plus various warehouses for general produce. Altogether, investment and property interests comprise over 800 hectares of dockland at Liverpool.

MD&HC future plans include construction of additional RoRo terminals and a new 800m long riverside container terminal capable of handling post-Panamax ships on the Liverpool side of the river.

d) Annual throughput

Total cargo handled by MD&HC in 2003 amounted to 31.7 million tonnes, equivalent to 5.7% of UK port traffic and making Liverpool the UK's 7th largest port in terms of tonnage. Oil products accounted for 11.6 million tonnes (37%), with containers accounting for 4.2 million tonnes (13%); almost 578,000 teu (356,000 units) were handled in 2003. Liverpool is the UK's 9th largest oil port (4.7% share) and 4th largest container port (7.8% share).

In addition, 392,000 RoRo trailers were handled in 2003, making Liverpool the 3rd largest RoRo port in the UK (6.2% of UK RoRo traffic). Total unitised traffic (i.e. containers and trailers) handled in 2003 amounted to 9.5 million tonnes. The port also has a very significant dry bulk throughput of 9.0 million tonnes (29%) a year.

e) Operating under private or public law

Liverpool is a privately owned 'company port' established originally by Act of Parliament and trading as Mersey Docks & Harbour Company (MD&HC), and is subject to requirements laid down by the Companies Act and other legislation governing general business activities. The following Acts of Parliament governs procedure with respect to port operations:

- Harbours, Docks and Piers Clause Act 1847
- Merchant Shipping Act 1894
- Dangerous Vessel Act 1985
- Dangerous Substances in Harbour Areas Regulations 1987
- Merchant Shipping (Tankers)(EEC Requirements) Regulations 1981
- Merchant Shipping and Marine Safety Act 1997
- Merchant Shipping (Oil Pollution Preparedness, Response and Co-operations Convention) Regulations 1998
- Pilotage Act 1987
- Merchant Shipping Act 1984 (Local Lighthouse Authority)
- Prevention of Oil Pollution Act 1971
- Merchant Shipping (Port Waste Reception Facilities) Regulations 1997
- Food and Environment Act 1985 Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988

- Docks Regulation 1988
- Health and Safety at Work Act 1974
- International Convention for the Prevention of Pollution from Ships 1973 as Modified by its Protocol 1978 (MARPOL 73/78)
- Port Marine Safety Code
- International Ship and Port Facility Security Code (ISPS)

MD&HC is the 'Competent Harbour Authority' and as such is responsible for safety and navigation within the port's area of jurisdiction. This includes provision of Vessel Traffic Services (VTS) and Pilotage, as well as maintaining safe navigation channels.

f) Port authority ownership

The Port of Liverpool (MD&HC) is owned by Peel Holdings plc, which is a public limited company listed on the London Stock Exchange. Peel acquired MD&HC in 2005. In addition to Liverpool, Peel also owns several other ports including Manchester, Clydeport, Medway Ports and Heysham, together with other transport-related businesses. The company owns subsidiaries offering container shipping services, stevedoring services, electricity generation and supply, logistics activities, shiprepair and marine engineering, and a leading port management consultancy. The Group operates Britain's largest free trade zone, Liverpool Freeport, and has a similar facility at Medway.

2.10.3.2 Governance structure of the port under analysis

Objective: To understand the governance structure of the port

a) Roles of the Ministry, city and port authority

The Department for Transport (DfT) sets out overall policy for ports in the UK; however, there is no financial support available from national government for port developments. National government involvement is more associated with enforcement of regulatory, health and safety, and security matters (e.g. Health & Safety Executive, Maritime & Coastguard Agency, HM Customs & Excise). Within the port area MD&HC also has a number of statutory responsibilities, such as maintaining safe navigation channels, VTS, and port police.

Local government (Liverpool City Council and Wirral County Council) provide no financial support for port investments, and have no involvement in the port in any operational or strategic management sense. The local authorities have a role in terms of local planning matters, although for major planning deliberations the DfT has a far more prominent role (e.g. the Minister deciding on largescale planning applications and Harbour Revision Orders).

In respect to land access, MD&HC works with the local authorities and national agencies (DfT Highways Agency, as well as the Strategic Rail Authority) to ensure adequate connections are provided and maintained to/from the port.

b) Boundaries between port and maritime administrations

MD&HC is responsible for all investments (infrastructure and superstructure) made within the port area. The UK government has no specific or comprehensive 'maritime administration' as such, with shipping and port matters subsumed within DfT.

c) Port governance model

MD&HC is essentially a private port owner/port authority employing a comprehensive as well as a landlord type approach with regard to port operations. Thus, while some of the terminal operations and activities within the port are undertaken by separate privately-owned entities under contract arrangements with MD&HC as landlord, at other terminals MD&HC and/or its subsidiaries act as the operator/stevedore. MD&HC operates the main container terminal (Seaforth) and most of the general cargo/bulk facilities at Liverpool, while the RoRo and ferry terminals are generally operated by users themselves, mostly the relevant carriers involved (e.g. P&O Ferries, Norse Merchant Ferries, Isle of Man Steam Packet etc.).

d) Roles of the public and private sectors within the port

National government agencies are primarily involved in safety (e.g. Health & Safety Executive, Maritime & Coastguard Agency etc.) and security matters (HM Customs & Excise). MD&HC and its private sector partners/tenants are responsible for the day to day activities in the port, as well as for long term investments, including dredging and other port infrastructure requirements.

e) Public/private nature of marine services

All port services including pilotage and towage are provided by private actors and these activities and functions depend entirely on private investment and income from user charges.

Tugs are available from Howard Smith Towage Ltd and Wijsmuller Marine Ltd.

2.10.3.3 Investment responsibilities: Body or institution financially responsible for the different types of investment and their maintenance

Objective: To identify the financial responsibilities for investment in the seaport

a) Access infrastructure

iii) By sea access channels, fairways, dredging works, protection works, breakwaters, navigation aids etc. are provided by MD&HC at its expense.

iv) By land road connections, rail connections, inland waterway connections within the port area are the responsibility of MD&HC. Road and rail connections outside the port area are the responsibility of national government entities (Highways Agency/local authorities and Strategic Rail Authority). However, the policy of DfT in instances where increasing port traffic flows lead to a requirement for new and/or improved landside infrastructure investments is that such investments should at least in part be met by the private port owners.

b) Terminal-related infrastructure

Civil works within the port area that allow the supply of services to ships and cargoes in the context of specific terminal or operator – e.g. quays, jetties, finger piers, specific mooring assets etc. are all the responsibility of the private port owner MD&HC and/or its private tenants.

c) Terminal superstructure and equipment

Surface arrangements, paving and buildings, mobile and fixed equipment – paving/surfacing, terminal lighting, parking areas, gates and fences, sheds, warehouses and stacking areas, tank farms and silos, offices, repair shops, other buildings, cranes, straddle carriers, vehicles, other cargo handling equipment – are all for the account of the private port owner MD&HC and/or its private tenants.

2.10.3.4 Financing structure

Objective: To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market

a) The financing body

100% of MD&HC's finance involves private capital. Finance is primarily obtained from shareholders funds, from other internal sources such as retained profits, and via loans from commercial banks.

b) The party that contracts the debt

MD&HC contracts debt for its own port infrastructure investments. Many of MD&HC's subsidiaries and port tenants also make their own investments, again depending on private capital.

c) Repayment conditions

Not applicable.

d) Are repayment conditions similar to market ones?

Private sector loan repayment conditions are based on commercial lending market requirements.

e) Are these conditions similar to those given to other infrastructure projects?

Conditions will be similar to other private infrastructure projects. However, as MD&HC owns several ports its potential to achieve economies of scale in finance and investment will tend to be greater than for an individual port, and this is a characteristic of the UK ports industry which is now highly concentrated.

2.10.3.5 Specific financial figure for types of investment and for which the financial responsibility falls on the port authority

Objective: To identify specific financial figures for the investment carried out by the port authority in the port

MD&HC publishes separate accounts for its ports but will not provide any disaggregated financial information. It is not therefore possible to identify payments received by the port from specific individual terminals or from shipping operators; quite simply, the multitude of port tenants and the confidentiality of this data preclude such detailed analysis. However, the basic principle remains, that port investments at Liverpool are made by the private sector alone, and paid for by the private sector with private capital.

Information was nevertheless obtained regarding specific investments made in the port during 2003 by MD&HC and its subsidiaries. Identified investments for the year totalled €32.8 million, of which an estimated €15.7 million (48%) was for terminal related infrastructures, €13.8 million (42%) was for superstructures, and €3.3 million (10%) was for access infrastructures.

Grant aid of €720,000 was received from EU ERDF funds towards terminal infrastructures. A further EU grant of €58,000 was received to assist with costs in respect of port road access outside terminals. Total grants in 2003 therefore amounted to 2.5% of overall capital investment.

Investment in the Seaforth Terminal has included new ship-to-shore gantry cranes, container interchange area for road transport, logistics building, multi-lane terminal gate, container handling plant and computer systems.

2.10.3.6 Specific financial figure for types of investment and for which the financial responsibility falls on a public body other than the port authority

Objective: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any public body in the port during 2003.

2.10.3.7 Financial aid received by the port authority from national, regional, local authorities

Objective: To identify forms of public aid in the ports sector

- a) The port received no compensation for operating losses.
- b) There was no provision of capital by public bodies.
- c) Non-refundable allowable grants from ERDF funds amounted to €778,000.
- d) There was no foregoing of profits or foregoing the recovery of sums due.
- e) Foregoing a normal return on public funds used does not apply.
- f) There was no compensation for financial burdens imposed by public agencies.
- g) There was no reduction in or exemption from general forms or levels of tax relief on profit, investment or property income taxes, VAT, local taxes, etc.

2.10.3.8 Sources of revenue of the port authority

Objective: To investigate the structure of the revenues collected to repay the funds

Port revenues, including port dues, leases, terminal handling charges, and other service charges are commercially confidential and will not be disclosed by MD&HC. However, as all investments in the port are privately funded, and as MD&HC makes significant profits from its port assets, it is evident that revenues must be sufficient to repay invested funds. In 2003, MD&HC turnover amounted to €428 million and net profit (before tax) was €77.3 million. These figures include turnover and net profit for all ports and operating subsidiaries in the MD&HC group as this information is not disaggregated by port.

2.10.4 Felixstowe

2.10.4.1 Characteristics of the port

Objective: To define the port under analysis and its characteristics

a) Description of the area for which the port is responsible

Felixstowe is located at the mouth of Harwich Harbour on the east coast of England. Felixstowe's excellent road/rail communications together with modern and fully equipped cargo handling facilities has made it the UK's premier container port. There are also facilities for Ro-Ro, forest products, general cargo and dry and liquid bulk cargoes.

Harwich Haven Deep Water Channel is generally 0.25nm or more wide, but narrows to 0.2nm close to the entrance and is marked on each side by numbered lightbuoys. It is entered at Harwich Channel No 1 lightbuoy, fitted with a Racon: at its inner end it merges with the inward and outward traffic lanes to become Harwich Channel, which is maintained at a depth of 14.5m.

Pilotage is compulsory. Geographical extent of the Haven Ports pilotage area is bounded by the following limits: As much of the River Orwell as lies below Ipswich Dock, and as far up the River Stour as the tide flows.

There are various designated anchorages in the approaches to the port. Tidal range is 4.0m at MHWS.

b) Type of commodities handled

Main cargoes handled at Felixstowe are containers and RoRo trailers, plus limited quantities of bulk fuel and general cargo.

c) Size and type of infrastructures and terminals

General cargo and bulk facilities are available at the Dock Basin, with depth of water 6.7m, and 512m length of quayage, equipped with 2 Scotch derrick cranes and 4 mobile cranes.

Felixstowe is equipped with two modern purpose built container terminals. Landguard Container Terminal has 439m of quay served by four ship-to-shore gantries, including 1 post Panamax and 13 rubber tyred gantries. The terminal handles a wide variety of container vessel types including fully cellular, multi-purpose and container/Ro-Ro. The storage capacity exceeds 10,000teu. The adjacent rail terminal has 3 x 20 wagon tracks and 2 rail mounted gantry cranes.

Trinity Container Terminal can work up to 7 large deep-sea containerships simultaneously. A total of 19 quayside gantries operate along its 2,334m quay, including 6 ultra post Panamax and 9 post Panamax cranes. Landside equipment includes 60 RTGs, supported by 96 terminal tractors. The total stacking capacity at Trinity is 49,811teu, including out of gauge storage. The adjacent rail terminal has 6 x 20 wagon tracks, 4 rail mounted gantry cranes and 3 reach stackers.

Trinity III, an extension of Trinity Terminal, covers 12.6ha and comprises a peninsular quay length 630m, width 185m. Its 3 super post Panamax ship to shore gantry cranes can handle ships with containers stowed 18 wide.

The port's main tanker berth can accept tankers up to 180m in length and up to 25,000t displacement with a max draft of 9.1m. A second berth is available on request and can serve tankers up to 124m LOA at a max draft of 6.4m below CD.

The port is equipped to handle all types of Ro-Ro vessels stern ramps, quarter ramps and side doors at four specialised Ro-Ro berths.

Various storage facilities are available including:

- Container freight stations - 6,000m²
- Ro-Ro transit shed - 10,350m²
- Warehouses - 75,810m²
- Transit sheds - 21,548m²

The ports' two rail terminals handle 22 incoming and 21 outgoing trains per day. A third rail terminal is planned for development on already reclaimed land at the Trinity Terminal.

Felixstowe has plans to reconfigure the southern part of the port to provide a total of 1,350m of deep-water quay, supported by 13 quayside cranes. Dredged to 16m, this will provide the deepest water at the port, suitable for berthing the latest generation of container vessels.

d) Annual throughput

Total cargo handled by Felixstowe in 2003 amounted to 22.3 million tonnes, equivalent to 4.0% of UK port traffic and making it the UK's 9th largest port in terms of tonnage. Containers accounted for the lion's share of tonnage, reaching 18.4 million tonnes (82%); almost 2,700,000 teu (1,585,000 units) were handled in 2003. Felixstowe is by far the UK's largest container port (35% share).

In addition, 232,000 RoRo trailers (3.0 million tonnes) were handled in 2003, making Felixstowe the 10th largest RoRo port in the UK (3.7% of UK RoRo traffic). Total unitised traffic (i.e. containers and trailers) handled in 2003 amounted to 21.4 million tonnes. The remaining 0.9 million tonnes comprised general cargo and bulk fuel.

e) Operating under private or public law

Felixstowe is a privately owned 'company port' established by Act of Parliament and currently trading as Hutchison Ports (UK) Limited, a subsidiary of Hong Kong based Hutchison Port Holdings, subject to requirements laid down by the Companies Act and other legislation governing general business activities. The following Acts of Parliament governs procedure with respect to port operations:

- Harbours, Docks and Piers Clause Act 1847
- Merchant Shipping Act 1894
- Dangerous Vessel Act 1985
- Dangerous Substances in Harbour Areas Regulations 1987
- Merchant Shipping (Tankers)(EEC Requirements) Regulations 1981
- Merchant Shipping and Marine Safety Act 1997

- Merchant Shipping (Oil Pollution Preparedness, Response and Co-operations Convention) Regulations 1998
- Pilotage Act 1987
- Merchant Shipping Act 1984 (Local Lighthouse Authority)
- Prevention of Oil Pollution Act 1971
- Merchant Shipping (Port Waste Reception Facilities) Regulations 1997
- Food and Environment Act 1985 Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988
- Docks Regulation 1988
- Health and Safety at Work Act 1974
- International Convention for the Prevention of Pollution from Ships 1973 as Modified by its Protocol 1978 (MARPOL 73/78)
- Port Marine Safety Code
- International Ship and Port Facility Security Code (ISPS)

Hutchison Ports is a 'Competent Harbour Authority' only to a limited extent (i.e. over the terminals and alongside the berths). Control over navigation access and pilotage to and within Harwich Haven rest with an independent non port owing trust, Harwich Haven Authority. The trust also has responsibility for provision of Vessel Traffic Services (VTS) and maintaining safe navigation channels.

f) Port authority ownership

The Port of Felixstowe is owned by Hutchison Port Holdings, which is a company listed on the Hong Kong Stock Exchange. Hutchison acquired Felixstowe in the early 1990's from P&O Group. In addition to Felixstowe, Hutchison also owns the port of Harwich, and the container terminal at Thamesport (Medway). The company owns several subsidiaries offering container transport/haulage services and associated logistics activities.

Hutchison Port Holdings is the world's largest port operator, and in 2004 moved 47.8 million teu at its 219 berths in 39 ports worldwide. Net profits for the group as a whole in 2003 amounted to US\$975 million on a turnover of US\$3.0 billion.

2.10.4.2 Governance structure of the port under analysis

Objective: To understand the governance structure of the port

a) Roles of the Ministry, city and port authority

The Department for Transport (DfT) sets out overall policy for ports in the UK, however, there is no financial support available from national government for port developments. National government involvement is more associated with enforcement of regulatory, health and safety, and security matters (e.g. Health & Safety Executive, Maritime & Coastguard Agency, HM Customs & Excise). Within the port area Hutchison Ports also has a number of statutory responsibilities, such as health and safety, and port police.

Local government (Suffolk County Council) provides no financial support for port investments, and has no involvement in the port in any operational or strategic management sense. Local authorities have a role in terms of local planning matters, although for major planning deliberations the DfT has a far more prominent role (e.g. the Minister deciding on largescale planning applications and Harbour Revision Orders).

In respect to land access, Hutchison Ports work with the local authorities and national agencies (DfT Highways Agency, as well as the Strategic Rail Authority) to ensure adequate connections are provided and maintained to/from the port.

b) Boundaries between port and maritime administrations

Hutchison Ports is responsible for all investments (infrastructure and superstructure) made within the port area. The UK government has no specific or comprehensive 'maritime administration' as such, with shipping and port policy matters subsumed within DfT.

c) Port governance model

Hutchison Ports is a private port owner/port authority employing a comprehensive type approach with regard to port operations. Thus, Hutchison Ports acts as the only stevedore in the port, which it also fully owns.

d) Roles of the public and private sectors within the port

National government agencies are primarily involved in safety (e.g. Health & Safety Executive, Maritime & Coastguard Agency etc.) and security matters (HM Customs & Excise). Hutchison ports are responsible for the day to day activities in the port, as well as for long term investments. Harwich Haven Authority is responsible for dredging and maintenance of the navigation channel.

e) Public/private nature of marine services

All port services including towage are provided by private actors and these activities and functions depend entirely on private investment and income from user charges. Pilotage is provided by Harwich Haven Authority.

2.10.4.3 Investment responsibilities: Body or institution financially responsible for the different types of investment and their maintenance

Objective: To identify the financial responsibilities for investment in the seaport

a) Access infrastructure

v) By sea access channels, fairways, dredging works, protection works, breakwaters, navigation aids etc. are provided by Harwich Haven Authority and/or Hutchison Ports at their expense.

vi) By land road connections, rail connections, inland waterway connections within the port area are the responsibility of Hutchison Ports. Road and rail connections outside the port area are the responsibility of national government entities (Highways Agency/local authorities and Strategic Rail Authority). However, the policy of DfT in instances where increasing port traffic flows lead to a requirement for new and/or improved landside infrastructure investments is that such investments should at least in part be met by the private port owners.

b) Terminal-related infrastructure

Civil works within the port area that allow the supply of services to ships and cargoes in the context of specific terminal or operator – e.g. quays, jetties, finger piers, specific mooring assets etc. are all the responsibility of the private port owner Hutchison Ports.

c) Terminal superstructure and equipment

Surface arrangements, paving and buildings, mobile and fixed equipment – paving/surfacing, terminal lighting, parking areas, gates and fences, sheds, warehouses and stacking areas, tank farms and silos, offices, repair shops, other buildings, cranes, straddle carriers, vehicles, other cargo handling equipment – are all for the account of the private port owner Hutchison Ports.

2.10.4.4 Financing structure

Objective: To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market

a) The financing body

100% of Hutchison Ports finance involves private capital. Finance is primarily obtained from shareholders funds, from other internal sources such as retained profits, and via loans from commercial banks.

b) The party that contracts the debt

Hutchison Ports contracts debt for its own port infrastructure investments. Hutchison Ports subsidiaries also make their own investments, again using private capital.

c) Repayment conditions

Not applicable.

d) Are repayment conditions similar to market ones?

Repayment conditions are based on commercial lending market requirements.

e) Are these conditions similar to those given to other infrastructure projects?

Conditions will be similar to other private infrastructure projects. However, as Hutchison Ports owns many terminals at ports around the world its potential to achieve economies of scale in finance/investments will tend to be greater than for an individual port (e.g. acquiring quayside container cranes for several ports at the one time).

2.10.4.5 Specific financial figure for types of investment and for which the financial responsibility falls on the port authority

Objective: To identify specific financial figures for the investment carried out by the port authority in the port

Hutchison Ports publishes separate accounts for its ports but will not provide any disaggregated financial information. It is not therefore possible to identify payments received by the port from specific individual terminals or from shipping operators; quite simply, the

confidentiality of this data precludes such detailed analysis. However, the basic principle remains, that port investments at Felixstowe are made by the private sector, and paid for by the private sector with private capital.

Information was nevertheless obtained regarding specific investments made in the port during 2003 by Hutchison Ports. Identified investments for the year totalled €43.8 million, of which €24.3 million (55%) was for terminal related infrastructures, €12.1 million (28%) was for superstructures.

In respect of access infrastructures, Hutchison Ports expense amounted to €3.8 million and Harwich Haven Authority also invested €3.6 million, giving a total expense for access infrastructure of €7.4 million (17%).

There was no grant aid received by the port of Felixstowe in 2003.

2.10.4.6 Specific financial figure for types of investment and for which the financial responsibility falls on a public body other than the port authority

Objective: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any public body in the port during 2003

2.10.4.7 Financial aid received by the port authority from national, regional, local authorities

Objective: To identify forms of public aid in the ports sector

- a) The port received no compensation for operating losses.
- b) There was no provision of capital by public bodies.
- c) There were no Non-refundable grants.
- d) There was no foregoing of profits or foregoing the recovery of sums due.
- e) Foregoing a normal return on public funds used does not apply.
- f) There was no compensation for financial burdens imposed by public agencies.
- g) There was no reduction in or exemption from general forms or levels of tax relief on profit, investment or property income taxes, VAT, local taxes, etc.

2.10.4.8 Sources of revenue of the port authority

Objective: To investigate the structure of the revenues collected to repay the funds

Port revenues, including port dues, leases, terminal handling charges, and other service charges are commercially confidential and will not be disclosed by Hutchison Ports. However, as all investments in the port are privately funded, and as Hutchison Ports makes significant profits from its port assets, it is evident that revenues must be sufficient to repay invested funds. In 2003 Hutchison Ports (UK) Limited had a turnover of €302.5 million and a profit (before tax) of €37.1 million. This includes the terminals at Thamesport and Harwich, as well as for Felixstowe port.

2.10.5 Grimsby & Immingham

2.10.5.1 Characteristics of the port

Objective: To define the port under analysis and its characteristics

a) Description of the area for which the port is responsible

Immingham is situated on the south bank of the River Humber, 10nm from the open sea. The port consists of an enclosed dock together with 5 river jetties. Four of the river jetties offer specialised facilities for the handling of all types of bulk liquids and gases. The fifth, the Immingham Bulk Terminal, is used by British Steel for the import of iron ore and other minerals. A further riverside terminal offers linkspans for RoRo services.

Max ship size handled in dock is 37,000dwt, with up to 300,000dwt partly laden at Immingham Oil Terminal on the river.

From the River Humber, the access to Immingham Dock is through an entrance lock which is approached between Eastern and Western jetties. The entrance lock has a length of 256m, width 27.4m and there is a depth over the inner sill of 11.3m at MHWS and 9.9m at MHWN. The lock has 3 pairs of gates, which can divide it into an outer part 96m length and an inner part 160m length. The lock can be entered at any state of the tide. Depths in the entrance to Immingham Dock vary.

Further expansion of the deep-water facilities at the port is planned through the progressive development of riverside berths in the area between the Immingham Bulk Terminal and the Immingham Gas Jetty where vessels with drafts up to 14m can be accommodated. Parliamentary powers have already been obtained for the development of berths in this important deep-water area which is backed by 24ha of land.

Likewise situated on the south bank of the River Humber, 9.5km from the open sea, the port of Grimsby consists of three commercial docks and three specialised fish docks. Grimsby mainly handles smaller vessels due to the port's lock and draft constraints.

b) Type of commodities handled

Principal imports at Immingham include chemicals, fertilisers, iron ore, crude minerals and ores, liquid acids and petroleum products. Exports include vehicles, chemicals, iron and steel, petroleum, coke and petroleum products. Immingham is also a major port for RoRo services.

At Grimsby, main exports at the commercial docks are iron and steel, chemicals, vehicles and manufactured goods, while imports chiefly consist of food products, iron, steel, vehicles and manufactured goods.

c) Size and type of infrastructures and terminals

Immingham has a number of specialised terminals inside and outside the lock entrance. Both the DFDS Nordic Terminal and the ABP Connect Terminal are inside the locks and these offer 4 RoRo berths plus a short sea container terminal. ABP has signed an agreement with DFDS Tor Line to develop a new €50 million riverside RoRo terminal outside the lock so that larger ships may be handled and turnaround time reduced. This new 50 acre terminal will open in 2006.

The Immingham bulk terminal is leased by ABP to Corus for handling iron ore and coal. Immingham Oil terminal is leased to Humber Oil Terminals, while various other jetties also handle oil products. The Humber International Terminal handles a variety of bulk and unitised cargoes. Phase 2 of Humber International Terminal involves an investment of €64 million to cater for deep-sea liner services as well as bulk cargo. Immingham offers a wide range of storage facilities mostly provide by port tenants.

The sister-port of Grimsby has RoRo and lolo terminals inside the lock for vessels up to 7,000 dwt. A major cargo is trade cars (350,000 annually) and Grimsby is the main northern distribution centre in the UK for Volkswagen/Audi.

Separate facilities at South Killingholme, 5 miles west of Immingham Dock, are owned by Simon Group plc. This includes a tanker jetty plus a purpose built RoRo terminal with 2 berths, the latter used by Cobelfret and Stena Line.

d) Annual throughput

Total cargo handled in 2003 amounted to 55.9 million tonnes, equivalent to 10% of UK port traffic and making Grimsby & Immingham the UK's largest port in terms of tonnage. Oil products accounted for 23.3 million tonnes (41%), with other dry bulks totalling 17.8 million tonnes (32%). RoRo and container traffic amounted to 12.8 million tonnes (747,000 units). Grimsby & Immingham is the UK's 6th largest oil port (8.9% share) and second largest RoRo port after Dover (7.2% share).

e) Operating under private or public law

Grimsby & Immingham is a privately owned port (owned by parent company ABP), and subject to requirements laid down by the Companies Act and other legislation governing general business activities. However, the following Acts of Parliament governs procedure with respect to port operations:

- Harbours, Docks and Piers Clause Act 1847
- Merchant Shipping Act 1894
- Dangerous Vessel Act 1985
- Dangerous Substances in Harbour Areas Regulations 1987
- Merchant Shipping (Tankers)(EEC Requirements) Regulations 1981
- Merchant Shipping and Marine Safety Act 1997
- Merchant Shipping (Oil Pollution Preparedness, Response and Co-operations Convention) Regulations 1998
- Pilotage Act 1987
- Merchant Shipping Act 1984 (Local Lighthouse Authority)
- Prevention of Oil Pollution Act 1971
- Merchant Shipping (Port Waste Reception Facilities) Regulations 1997
- Food and Environment Act 1985 Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988

- Docks Regulation 1988
- Health and Safety at Work Act 1974
- International Convention for the Prevention of Pollution from Ships 1973 as Modified by its Protocol 1978 (MARPOL 73/78)
- Port Marine Safety Code
- International Ship and Port Facility Security Code (ISPS)

ABP is the 'Competent Harbour Authority' for the Humber and as such are responsible for safety and navigation within the port's area of jurisdiction, and this includes provision of Vessel Traffic Services (VTS) and Pilotage, as well as maintaining safe navigation channels.

f) Port authority ownership

Grimsby & Immingham is owned by Associated British Ports Holdings plc (ABP), which is a public limited company listed on the London Stock Exchange, and a FTSE 250 company with a market capitalisation of around €2.16 billion. ABP owns a total of 21 UK ports, together with other transport-related businesses that constitute the ABPH Group. As a whole, ABP ports handle approximately a quarter of the UK's entire seaborne trade.

2.10.5.2 Governance structure of the port under analysis

Objective: To understand the governance structure of the port

a) Roles of the Ministry, city and port authority

The Department for Transport (DfT) sets out overall policy for ports in the UK, however, there is no financial support available from national government for port developments. National government interest is more associated with enforcement of regulatory, health and safety, and security matters (e.g. Health & Safety Executive, Maritime & Coastguard Agency, HM Customs & Excise). Within the port, ABP also has statutory responsibilities, most of which were transferred from its state-owned predecessor at the time of privatisation.

Local government (North Lincolnshire County Council) provide no financial support for port investments, and have no involvement in the port in any operational or strategic management respects. Local authorities do nevertheless have a role in terms of planning matters, although for major planning deliberations the DfT has a more prominent role (e.g. the Minister deciding on largescale planning applications, as well as Harbour Revision Orders).

With respect to land access, ABP works with the local authorities and national agencies (DfT Highways Agency, as well as the Strategic Rail Authority) to ensure adequate connections are provided and maintained to/from the port.

b) Boundaries between port and maritime administrations

ABP is responsible for all investments (infrastructure and superstructure) made within the port area. The UK government has no specific or comprehensive 'maritime administration' as such, with shipping and port matters subsumed within DfT.

c) Port governance model

ABP is essentially a private port owner/port authority albeit employing a landlord approach with regard to port operations. Thus, most of the terminal operations and activities within the port are undertaken by other privately-owned entities under contract arrangements with ABP as landlord.

d) Roles of the public and private sectors within the port

National government agencies are primarily involved in safety (Health & Safety Executive, Maritime & Coastguard Agency etc.) and security matters (HM Customs & Excise). ABP and its private sector partners/leaseholders are responsible for the day to day activities in the port, as well as for long term investments, including dredging.

e) Public/private nature of marine services

All port services including pilotage and towage are provided by private actors and these depend entirely on private investment.

2.10.5.3 Investment responsibilities: Body or institution financially responsible for the different types of investment and their maintenance

Objective: To identify the financial responsibilities for investment in the seaport

a) Access infrastructure

vii) By sea access channels, fairways, dredging works, protection works, breakwaters, navigation aids etc. are provided by ABP at its expense.

viii) By land road connections, rail connections, inland waterway connections within the port area are the responsibility of ABP. Road and rail connections outside the port area are the responsibility of national government entities (Highways Agency/local authorities and Strategic Rail Authority). However, the policy of DfT in instances where increasing port traffic flows require new and/or improved landside infrastructure investments, is that such investments should at least partly be met by the private port owners.

b) Terminal-related infrastructure

Civil works within the port area that allow the supply of services to ships and cargoes in the context of specific terminal or operator – e.g. quays, jetties, finger piers, specific mooring assets etc. are all the responsibility of the private port owner ABP and/or its private tenants.

c) Terminal superstructure and equipment

Surface arrangements, paving and buildings, mobile and fixed equipment – paving/surfacing, terminal lighting, parking areas, gates and fences, sheds, warehouses and stacking areas, tank farms and silos, offices, repair shops, other buildings, cranes, straddle carriers, vehicles, other cargo handling equipment – are all for the account of the private port owner ABP and/or its private tenants.

2.10.5.4 Financing structure

Objective: To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market

a) The financing body

100% of ABP's finance is private capital. Finance is primarily obtained from shareholders funds, from internal sources, and via loans from commercial banks.

b) The party that contracts the debt

ABP contracts debt for its own port infrastructure investments. Many of ABP's port tenants also make their own investments, again using private capital.

c) Repayment conditions

Not applicable.

d) Are repayment conditions similar to market ones?

Repayment conditions are based on commercial lending market requirements

e) Are these conditions similar to those given to other infrastructure projects?

Conditions will be similar to other private infrastructure projects. However, as ABP owns 21 ports its potential to achieve economies of scale in finance will tend to be greater than for an individual port, and this is a characteristic of the UK ports industry which is now highly concentrated.

2.10.5.5 Specific financial figure for types of investment and for which the financial responsibility falls on the port authority

Objective: To identify specific financial figures for the investment carried out by the port authority in the port

ABP publishes consolidated accounts for all its 21 ports but was unwilling to provide disaggregated financial information for any individual port. It is not therefore possible to identify payments received by the port from specific individual terminals or from shipping operators; quite simply, the multitude of port tenants and the confidentiality of this data preclude such detailed analysis. However, the basic principle remains, that port investments at Grimsby & Immingham are made by the private sector, and paid for by the private sector with private capital.

Information was however obtained from ABP regarding specific investments made in the ports of Grimsby & Immingham during 2003. Identified investments for the year totalled €32.6 million, of which €19.2 million (59%) was for terminal related infrastructures, €9.6 million (29%) was for superstructures, and €3.8 million (11.6%) was for access infrastructures.

2.10.5.6 Specific financial figure for types of investment and for which the financial responsibility falls on a public body other than the port authority

Objective: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any public body in the port during 2003.

2.10.5.7 Financial aid received by the port authority from national, regional, local authorities

Objective: To identify forms of public aid in the ports sector

- a) Grimsby & Immingham receives no compensation for operating losses.
- b) There was no provision of capital by public bodies.
- c) There were no non-refundable grants or loans on privileged terms provided by public bodies.
- d) There was no foregoing of profits or foregoing the recovery of sums due.
- e) Foregoing a normal return on public funds used does not apply.
- f) There was no compensation for financial burdens imposed by public agencies.
- g) There was no reduction in or exemption from general forms or levels of tax relief on profit, investment or property income taxes, VAT, local taxes, etc.

2.10.5.8 Sources of revenue of the port authority

Objective: To investigate the structure of the revenues collected to repay the funds

Port revenues, including port dues, leases, terminal handling charges, and other service charges are commercially confidential and will not be disclosed by ABP. However, as all investments in the port are privately funded, and as ABP makes significant profits from its port investments, it is evident that revenues must be sufficient to repay invested funds.

In 2003 ABP (UK ports & transport) as a whole had a turnover of €503 million and achieved an operating profit (before goodwill and exceptional items) of €219 million. Grimsby & Immingham accounts for some 44% of tonnage through ABP's ports annually so logically that port will generate a very significant share of group income and profit.

2.10.6 London

2.10.6.1 Characteristics of the port

Objective: To define the port under analysis and its characteristics

- a) Description of the area for which the port is responsible

London is the capital city and one of the principal ports of the United Kingdom. The port of London is a combination of dock and riverside terminals. The port covers a vast area stretching 150km from the North Sea inland to Teddington. Accommodation is provided by one enclosed dock system (Port of Tilbury) plus a large number of tidal river berths. Many of

the constituent parts would qualify in terms of berths, equipment and traffic as medium sized ports in their own right. The Port of London Authority (PLA), which is a trust port, acts as regulator within the port, though PLA does not itself operate port facilities.

b) Type of commodities handled

There is a great diversity of traffic handled at the 70 or so port and wharf facilities along the River Thames. These range from the many passenger terminals in the city, to small aggregate facilities at Fulham, through RoRo terminals such as Dart Terminal London and CdMR Purfleet, to the main container terminal and large enclosed dock system at Tilbury, as well as major oil terminals such as Coryton.

c) Size and type of infrastructures and terminals

See Annex II for a detailed list.

d) Annual throughput

Total cargo handled by the port of London in 2003 amounted to 51.0 million tonnes, equivalent to 9.2% of UK port traffic and making it the UK's 3rd largest port in terms of tonnage. Bulk fuel totalled 19.7 million tonnes (39%) with dry bulk cargo amounting to 15.0 million tonnes (29%). Containers accounted for 7.6 million tonnes (15%), with almost 623,700 teu (544,000 units) handled in 2003 (12% of UK container traffic).

In addition, 333,000 RoRo trailers (5.5 million tonnes) were handled in 2003, making London the 5th largest RoRo port in the UK (5.3% of UK RoRo traffic). Total unitised traffic (i.e. containers and trailers) handled in 2003 amounted to 13.0 million tonnes. General cargo totalled 3.2 million tonnes.

e) Operating under private or public law

PLA is a trust port established by Act of Parliament and is subject to requirements laid down by the Companies Act and other legislation governing general business activities, as are other private companies involved in port operations in London. The following Acts of Parliament governs procedure with respect to port operations:

- Harbours, Docks and Piers Clause Act 1847
- Merchant Shipping Act 1894
- Dangerous Vessel Act 1985
- Dangerous Substances in Harbour Areas Regulations 1987
- Merchant Shipping (Tankers)(EEC Requirements) Regulations 1981
- Merchant Shipping and Marine Safety Act 1997
- Merchant Shipping (Oil Pollution Preparedness, Response and Co-operations Convention) Regulations 1998
- Pilotage Act 1987
- Merchant Shipping Act 1984 (Local Lighthouse Authority)
- Prevention of Oil Pollution Act 1971

- Merchant Shipping (Port Waste Reception Facilities) Regulations 1997
- Food and Environment Act 1985 Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988
- Docks Regulation 1988
- Health and Safety at Work Act 1974
- International Convention for the Prevention of Pollution from Ships 1973 as Modified by its Protocol 1978 (MARPOL 73/78)
- Port Marine Safety Code
- International Ship and Port Facility Security Code (ISPS)

PLA is the 'Competent Harbour Authority' for the River Thames. Control over navigation access and pilotage to and within the Thames rests with the PLA. The latter also include responsibility for provision of Vessel Traffic Services (VTS) and maintaining safe navigation channels.

f) Port authority ownership

Trust ports are neither public nor private. Ownership of trust ports is 'uncertain'. Trusts are created by Act of Parliament. The management of trusts usually comprises an executive management team overseen by a board comprising representatives of port users, local and national government, and trade unions.

2.10.6.2 Governance structure of the port under analysis

Objective: To understand the governance structure of the port

a) Roles of the Ministry, city and port authority

The Department for Transport (DfT) sets out overall policy for ports in the UK, however, there is no financial support available from national government for port developments. National government involvement is more associated with enforcement of regulatory, health and safety, and security matters (e.g. Health & Safety Executive, Maritime & Coastguard Agency, HM Customs & Excise). Within the port area PLA has a number of statutory responsibilities, such as ensuring safe navigation, and licensing port works.

Local government along the length of the river (City of London, Thurrock Council, Essex Council, Kent Council etc.) provide no financial support for port investments, and have no involvement in the port in any operational or strategic management sense. Local authorities have a role in terms of local planning matters, although for major planning deliberations the DfT has a far more prominent role (e.g. the Minister deciding on largescale planning applications such as London Gateway Terminal and Harbour Revision Orders).

In respect to land access, PLA work with terminal owners/operators and the local authorities and national agencies (DfT Highways Agency, as well as the Strategic Rail Authority) to ensure adequate connections are provided and maintained to/from the port.

b) Boundaries between port and maritime administrations

PLA is not responsible for investments (infrastructure and superstructure) made within port cargo handling/wharf areas as this tends to be the role of private port owners/operators. The UK government has no specific or comprehensive 'maritime administration' as such, with shipping and port policy matters subsumed within DfT.

c) Port governance model

PLA is a non port-owning trust port owner/port authority, rather similar to Harwich Haven Authority. This means it does not fit very well into the usual landlord or service port model, as its role is primarily regulatory.

d) Roles of the public and private sectors within the port

National government agencies are primarily involved in safety (e.g. Health & Safety Executive, Maritime & Coastguard Agency etc.) and security matters (HM Customs & Excise). PLA are responsible for dredging and maintenance of the navigation channel, plus pilotage and VTS services.

e) Public/private nature of marine services

All port services including towage are provided by private actors and these activities and functions depend entirely on private investment and income from user charges. Pilotage is provided by PLA with costs fully recoverable from users.

2.10.6.3 Investment responsibilities: Body or institution financially responsible for the different types of investment and their maintenance

Objective: To identify the financial responsibilities for investment in the seaport

a) Access infrastructure

- By sea access channels, fairways, dredging works, protection works, breakwaters, navigation aids etc. are provided by PLA at their expense.
- By land road connections, rail connections, inland waterway connections within the port area are the responsibility of private port and wharf owners. Road and rail connections outside the port area are the responsibility of national government entities (Highways Agency/local authorities and Strategic Rail Authority). However, the policy of DfT in instances where increasing port traffic flows lead to a requirement for new and/or improved landside infrastructure investments is that such investments should at least in part be met by the private port owners

b) Terminal-related infrastructure

Civil works within the port area that allow the supply of services to ships and cargoes in the context of specific terminal or operator – e.g. quays, jetties, finger piers, specific mooring assets etc. are the responsibility of the private port owners.

c) Terminal superstructure and equipment

Surface arrangements, paving and buildings, mobile and fixed equipment – paving/surfacing, terminal lighting, parking areas, gates and fences, sheds, warehouses and stacking areas, tank farms and silos, offices, repair shops, other buildings, cranes, straddle carriers, vehicles, other cargo handling equipment – are for the account of the private port/wharf owners.

2.10.6.4 Financing structure

Objective: To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market

a) The financing body

100% of PLA finance involves private capital. Finance is primarily obtained from internal sources such as retained profits, and via loans from commercial banks. A trust has no shareholders.

b) The party that contracts the debt

PLA contracts debt for its own port infrastructure investments, primarily in respect of maintaining navigation channels. The many other private port owners on the river also make their own investments in infrastructure, again depending on private capital.

c) Repayment conditions

Not applicable.

d) Are repayment conditions similar to market ones?

Repayment conditions are based on commercial lending market requirements.

e) Are these conditions similar to those given to other infrastructure projects?

Conditions will be similar to other private infrastructure projects.

2.10.6.5 Specific financial figure for types of investment and for which the financial responsibility falls on the port authority

Objective: To identify specific financial figures for the investment carried out by the port authority in the port

PLA publishes accounts but financial information only relates to its role as maintainer of navigation channels and pilotage. It is not possible to identify payments received by the multitude of private port owners specific individual terminals or from shipping operators; quite simply, the commercial confidentiality of this data precludes such detailed analysis. However, the basic principle remains, that port investments throughout the port of London are made by the private sector, and paid for by the private sector using private capital.

Information was nevertheless obtained regarding specific investments made in the port during 2003, by both PLA and by the private owners of Tilbury Container Terminal (TCS). Identified investments for the year totalled €87.3 million, of which €46.0 million (53%) was for access infrastructures – mainly river dredging and paid for by PLA. Tilbury Container Services estimated investment totalled €25.9 million (30%) for terminal related infrastructures, €12.9 million (15%) for superstructures, and €2.3 million (3%) for access infrastructures at the terminal.

There was no grant aid received by the port of London in 2003.

2.10.6.6 Specific financial figure for types of investment and for which the financial responsibility falls on a public body other than the port authority

Objective: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any public body in the port during 2003.

2.10.6.7 Financial aid received by the port authority from national, regional, local authorities

Objective: To identify forms of public aid in the ports sector

- a) The port received no compensation for operating losses.
- b) There was no provision of capital by public bodies.
- c) There were no Non-refundable grants.
- d) There was no foregoing of profits or foregoing the recovery of sums due.
- e) Foregoing a normal return on public funds used does not apply.
- f) There was no compensation for financial burdens imposed by public agencies.
- g) There was no reduction in or exemption from general forms or levels of tax relief on profit, investment or property income taxes, VAT, local taxes, etc.

2.10.6.8 Sources of revenue of the port authority

Objective: To investigate the structure of the revenues collected to repay the funds

Port revenues, including port dues, leases, terminal handling charges, and other service charges are commercially confidential and will not be disclosed by PLA or the various port and wharf owners on the river. All investments in the port are privately funded, with PLA covering its costs from user charges, meaning revenues are sufficient to repay invested funds.

In 2003 PLA had a turnover of €46.5 million and a profit (before tax) of €0.9 million. Income from conservancy charges (a charge for using navigation channels) on cargo and vessels amounted to €18.1 million (40%), and income from pilotage was €14.1 million (30%). Remaining revenue was mainly derived from port licenses and rents, and moorings.

2.10.7 Conclusions

Objective 1: To define the port under analysis and its characteristics

London, Southampton, Liverpool and Grimsby & Immingham are large multipurpose privately-owned ports. Felixstowe is in the main a container port, also in private ownership. Collectively these five ports handled almost 200 million tonnes in 2003, equivalent to 35% of all UK port traffic. Perhaps more significantly, these five ports combined account for some 86% of all UK container traffic.

Objective 2: To understand the governance structure of the port

State agencies have a role within ports in terms of ensuring safety and (national) security. Private ports also act as 'Competent Harbour Authority'. In some cases there is a separate non port-owning port authority (trust port) in a given port area, the latter with a focus on ensuring safe navigation and pilotage. Local government and central government bodies provide no financial support in respect of port investments. The UK has no 'Maritime Administration' as such, with port policy subsumed within the Department for Transport. While some ports operate on the basis of a private landlord system (e.g. ABP ports), others are private comprehensive ports with one cargo handler owned by the port itself (e.g. Felixstowe/Hutchison), whereas London is a massive array of private wharf/port owners situated along a river that is itself administered by a trust in respect of safety of navigation and pilotage.

Objective 3: *To identify the financial responsibilities for investment in the seaport*

Government is not responsible for any financial investments made in major UK seaports. All investments are the responsibility of the private port owners and/or to a much lesser extent self-financing trust ports (the latter mainly in respect of access channel provision and maintenance).

Land access infrastructures outside of port areas are the responsibility of public government agencies, although these agencies are increasingly proposing that private port operators also make a contribution to such investments where this is necessary due to port traffic growth.

Objective 4: *To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market*

Finance for port investments in the UK is primarily obtained from each port company's shareholders funds (as appropriate), from internal sources such as retained profits, and also via loans from commercial banks

Objective 5: *To identify specific financial figures for the investment carried out by the port authority in the port*

In the UK context, the major ports are private port authorities', but may also be (in some instances) supplemented by an independent trust port authority, albeit the latter is not a public sector body. Thus all port investment made by port authorities within major UK seaports are considered as private investment, with all investment costs recovered through user charges.

Total investments in the 5 UK ports analysed during 2003 amounted to an estimated €267.3 million (Table 2-66). Private port investment accounted for 81% of these investments, or €216.8 million, and mostly for terminal related infrastructures and superstructures. Trust port investment amounted to €49.7 million (18.6%), and was more or less entirely related to access infrastructures (dredged and maintained channels). Just €0.77 million was derived from ERDF grant funding (for port of Liverpool), this accounting for 0.3% of overall investment.

Table 2-66: Five Major UK Ports, Summary of Investments, 2003

Categories	(€000's)				
	Trust Port	Private Port	Other (Dev. Agency)	Total	%
Access Infrastructures	49,723	15,900	58	65,681	24.6%
Terminal-Related Infrastructures		120,408	720	121,128	45.3%
Superstructures		80,464		80,464	30.1%
Total	49,723	216,772	778	267,273	100%
%	18.6%	81.1%	0.3%	100%	

Objective 6: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any public body in the five ports considered during 2003.

Objective 7: To identify forms of public aid in the ports sector

Only Port of Liverpool received grant-aid (understood to be ERDF assistance) for infrastructure in 2003, this amounting to €720,000, plus a €58,000 grant to assist with port road infrastructure access costs. No other grants or public sector assistance was identified for any of the five UK ports.

Objective 8: To investigate the structure of the revenues collected to repay the funds

Port revenues, including port dues, leases, terminal handling charges, and other service charges are regarded as commercially confidential and will not be disclosed by the private port owners.

Private port and trust port investment costs in respect of dredged channels are fully recovered through user charges.

All private and trust ports fully cover their costs and achieve commercial profits in a competitive (UK) marketplace. All UK ports in the study achieved a profit from operations in 2003, and this was accomplished without any public subsidies.

2.10.8 Annex**2.10.8.1 Annex I - Consultees**

Port of Liverpool	Frank Robotham
Southampton	Doug Morrison
Southampton – Southampton Container Terminal	Ken Bell/Alex Hunter
London – Tilbury Container Services	John Buckley/Neil Bayfield
London - Tilbury	Perry Glading/Jerry Gledhill
Felixstowe Dock & Railway Company	Paul Davey
Grimsby & Immingham/ABP	John Copping
Grimsby & Immingham/PD Ports	Jerry Hopkinson
Trinity House	Kathryn Hossain
City of Liverpool	Charlie Parker
City of Southampton	
Suffolk Council	
Lincolnshire Council	
PLA	John Eves
Harwich Haven Authority	Paul Buckle
Highways Agency	Guy Pearce
SRA-Rail	
British Ports Association	David Whitehead
UK Major Ports Group	John Dempster

2.10.8.2 Annex II - Main wharf and port facilities available in London

TILBURY

An extensive multipurpose port handling containers, bulk, paper, cars, grain and cruise passengers. Considerable quayside capacity both within and outside the locks. Inside depths are up to 12.0m and outside the container terminal offers a minimum depth of 13.5m and 600m of quayside.

CONVOYS WHARF

This comprises a jetty plus upstream Ro-Ro berth providing accommodation for 3 vessels. Jetty is 245m in length plus pontoon and for Ro-Ro working. Second Ro-Ro berth (upstream of jetty) is 180m in length. Depth of water alongside jetty is 5.5m MLWS and 11.5m MHWS. Vessels up to 8.5m draft can berth safely aground. Upstream Ro-Ro berth has 8.0m depth at MLWS and 14.0m at MHWS. There is one x 40t crane at 30m radius; 35t under container twist locks. Total undercover warehouse space of 65,000m² and 17,000m² of container storage space. Terminal specialising in newsprint, forest products, general cargo and containers.

LONDON STEEL TERMINAL

Two berths, 90m total length, depth of water 5.0m MHWS. Two cranes of 30t capacity. Warehouse space of 5,000m², and a covered transit area of 14,000t for the handling of steel cargoes.

ANGERSTEIN WHARF

Two berths with a length of 100m and water depth of 10.8m MHWS providing an 800t barge facility. Open storage available.

VICTORIA WHARF

One berth 100m in length with a depth of 7.7m at MHWS. Open storage available.

ORCHARD WHARF:

An 80m berth, 6.8m, MHWS depth of water suitable for self-discharge vessels. Storage of bulk aggregates.

CRINGLE DOCK

An 80m berth, 8.6m MHWS depth of water, 10t crane discharge. Storage of bulk aggregates.

THAMES WHARF

One riverside berth 185m in length with a depth of 5.8m at MHWS. Bulk grabbing cranes and approx 1ha of open storage. Bulk handling facility for handling the import, export and processing of scrap metal.

VICTORIA DEEP WATER TERMINAL

Two Berths, total length 259m. Depth of water 6.0m at MLWS, 12.5m at MHWS. Open storage area of 1.6ha.

WARDS WHARF

One berth with a length of 92m and for alongside depth subtract 2.8m from London Bridge data in tide tables. Vessels up to 3,000t can be accommodated. Bulk handling facility for handling the import, export and processing of scrap metal. Close connection to national motorway system. Large storage areas available.

THAMES REFINERY

Raw Sugar Jetty has a length of 161m, depth of water (low) 10.0m, (high) 16.75m, which can accommodate vessels up to 182m in length. Discharge of sugar by large grabbing crane and a continuous bucket unloader. Over 1,000,000t of raw cane sugar imported per year.

REFINED WHARF JETTY

Length 48m, depth of water low, Dry, high, 5.75m. Used for the export of refined sugar in unit loads to Europe and Scandinavia.

SHORE BERTH

Length 180m, dries at LW with depth of 4.5m at HW.

MAYER PARRY RECYCLING LIMITED

One NAABSA berth 200m in length; for depth of water subtract 2.2m from London Bridge data in tide tables. Open storage available.

WELBECK WHARF

Two berths with a total length of 175m, depth 5.5m (tidal). One x 110C Eiger mobile crane and 9 x 25t, 3 x 20t and 7 x 5t warehouse cranes. Cargo accommodation: In temperature controlled conditions 40,300m² total site; 6,385m² covered storage for wharf cargoes under 25t capacity cranes; 9,340m² covered storage and process warehousing.

MINOCO WHARF

One berth, length 79m with alongside depth of 5.6m. Private jetty for the import of manufacturing raw materials. Lubricants and Base oils.

PINN'S WHARF

Two berths length 68m each, 137m overall, depth of water NAABSA berth spring tides 6.7m, neap tides 3.95m. Three mobile cranes max lift 18t and 7 forklift trucks. Open storage and some covered warehousing. Own weighbridge. Specialising in timber products and steel.

KIERBECK WHARF

One open berth with a length of 150m, for depth of water subtract 1.8m from London Bridge data in tide tables. Mobile crane of 25t and crawler crane of 85t. Processing plant for steel reinforcement, 1.2ha of cargo accommodation 0.6ha of which are covered. Specialising in steel reinforcement straight lengths and coils.

STEEL WHARF

One open berth with a length of 60m, for depth of water subtract 1.8m from London Bridge data in tide tables. Mobile crane of 25t and crawler crane of 85t available. Processing plant for steel reinforcement. Cargo accommodation 1.0ha of which 1,858m² is covered.

Specialising in steel reinforcement straight lengths and coils. Kierbeck Wharf and Steel Wharf have a combined unbroken berth length of 210m.

RIPPLEWAY WHARF

One open berth 95m in length, depth 5.0m 3 x 40t jetty cranes. Total Site of 7.2ha, 4.0ha of which are under cover warehouse space. Specialising in timber forest products.

DOCKLANDS WHARF

NAABSA berth 160m in length, depth of water 5.0m MHWST. Two x 5t cranes, 1 x 10t Liebherr and 300t heavy lift (on demand). Grab discharge speciality, 40t weighbridge and open storage facility available with possibility of limited covered storage of 800m². Grab discharge of fertiliser and bulk material, big bag handling available.

DAGENHAM DOCK EAST JETTY

One berth, 68m in length suitable for vessels up to 5,000dwt, up to 100m in length. There is 0.40ha of open storage, plus further open storage and covered warehousing nearby. Specialising in bulk handling, general cargoes and forest products.

NO 1 WESTERN EXTENSION

Berth length 100m, depth of water 4.5-6.0m (tidal). Two grab discharge cranes 3-5t capacity, large open storage area available, 40t weighbridge facility. Bulk handling facility.

FORD MOTOR COMPANY, DAGENHAM

One Ro-Ro berth of length 241m. Depth of water 13.85m MHWST, 6.4m MLWST. One 10t mobile crane and 1 x 32t Scotch Derrick. Specialising in unaccompanied trailers for Ford Motor Company components. Car import/export handling capability, container storage area and trailer parks.

PIONEER WHARF

One jetty length 160m accessed by a 43m walkway, depth of water 8.3m below OD Newlyn. Two separate receiving hoppers and conveyors 1,800tph to receive self-discharging vessels.

MURPHY'S WHARF

One jetty length 143m accessed by a 43m walkway, depth of water 8.4m below OD Newlyn. Receiving hopper and discharging conveyors 2,200tph for self-discharging vessels.

DELTA WHARF

One, two dolphin, berth with length 150m and accessed by a 40m walkway, depth of water 5.9m below Ordnance Datum Newlyn. Receiving hopper and discharge conveyor 2,200tph for self-discharging vessels. Barge loading jetty: Length 60m, depth of water 3.9m below OD Newlyn. Feeder conveyor 300tph.

MULBERRY WHARF

One berth of 69m in length, depth of water 5.2m MHWS. One mobile crane of 5t capacity and 1 x 2.5t fixed crane. Specialising in bulk handling, overside and direct delivery. Limited storage of bulk aggregates available.

HARRISON'S WHARF

Two berths with a length of 100m, depth of water 5.0m MHWS. One 45t crawler crane, one 35t mobile crane and floating cranes. Specialising in forest products, steel, aggregates, plant/machinery, some bulk products. Barge/pontoon owner/operators. Heavy plant slipway on berth.

PURFLEET THAMES TERMINAL LTD

Equipped with two modern floating Ro-Ro berths each over 200m in length that can accommodate two stern ramp ships simultaneously and a lay-by berth 175m in length. Depth of water 8.0m MLWS. The Terminal covers a total of 25ha. Covered transshipment/restow area of 3,000m². Space on terminal for 1,000 trailers and 12,000 cars. Equipped with 15 terminal tractors, 1 x 42t toplift, 1 x 30t bottom lift, 1 x 42t reachstacker, 1 x 40t travelling gantry crane and a wide range of forklift trucks, 20 plug in facilities for temperature controlled units. Private rail tracks with direct connection to national rail network. On site Agency and HMC&E service available.

VAN DEN BERGH JETTY

Two berths. Outer 100m length with mooring dolphins able to accommodate ship lengths of circa 200m, draft 8.25m. Inner barge berth 50m length with draft of 3.0m approx. Various discharge line facilities, 2 Emco 6in and flexes to segregated line systems. Handles approx 250,000t of vegetable oil.

JOHNSON'S WHARF

Berth is dedicated to the company's own dredgers. There are 2 receiving hoppers and 1,600tph discharge conveyors for self discharging vessels.

PURFLEET AGGREGATES

Two berths with 2 dolphins at each berth. Dedicated to own dredgers and self discharging slag bulker. Two receiving hoppers, 1,800tph and 2,000tph. Discharge conveyors for self discharging vessels.

THURROCK MARINE TERMINAL

One berth of 190m length, depth of water 8.5m CD. One Kovako pneumatic ship unloader. Bulk powder discharge operations, 4 x 10,000t storage silos. Barge mooring along inner berth. Road access. Import, sale and distribution by road of bulk cement throughout UK.

THAMES EUROPORT

Two Ro-Ro berths and planned development for 200m of quayside and Lo-Lo berth. Each berth can accommodate vessels up to 236m LOA. Min depth of water 11.5m at CD. Cargo stowage area of 16.1ha. Storage sheds available upon request. The Terminal can handle Ro-Ro, Sto-Ro, cars, containers, forest products, fresh produce. Direct access to the Trans-European Network and National motorway system via Junction 1A of the M25.

ALPHA JETTY

One jetty approx 149m in length, depth of water, 5.0m CD (MHWS + 6.2m CD). Cargo accommodation open storage. Specialising in sea dredged aggregates, and explosives shipping.

GIBBS WHARF

Wall berth can accommodate vessels up to max 100m in length. Water depth 2.0m below CD at LW. Grab discharge. Bulk Aggregate type cargoes. Discharge 200tph, 7 day week working berth.

HALL AGGREGATES WHARF

One berth 100m in length, depth 9.0m. Sand and gravel discharges and processing, with conveyor loading of all suitable materials for home or export. 27in pump/pipe discharge of aggregates.

TOWER WHARF

Three berths (one covered), depth of water 11.5m at LAT accepting vessels up to 200m LOA. Covered berth used for discharge of sensitive commodities from low air draft coasters of around 3,000dwt. Two x 5t quay cranes, 3 x 40t gantry cranes operating on main jetty and covered berth. Specialised equipment for handling forest products, steel and non-ferrous metals. Approved Customs warehouse, allowing duty and VAT on goods to be deferred whilst goods are in store. An 8ha site with warehouse space of 32,700m².

ROBINS WHARF

One berth accepting ships to 100m length, water depth 2.0m above CD at LW. Specialising in aggregates, coal, petroleum coke and bulk aggregate products. Discharge by grab at 200tph, 7 day week working berth.

NORTHFLEET TERMINAL LTD

One deep water berth with a length of 187.45m allowing a maximum ship LOA of 183m; one berth for oil barges and one barge bay. Depth 9.75m MLWS. Three x 2.5t shore cranes available. Covered storage of 1,083m², 20,000m² open storage. HM Customs sufferance for forest products wood pulp and lumber.

IMPERIAL WHARF

One deep water jetty 91m in length and one NAABSA berth 92m in length. Depth of water 9.0m LAT. Three 5t cranes available. Open cargo accommodation. Specialising in forest products and bulk cargoes.

DENTON WHARF

One berth of length 145m, depth of water 10.4m MHWS. Storage warehouses of 5,000m², 3.65ha of open storage two thirds of which are for containers. Five x 3-30t capacity cranes, two 30t container gantries on container park. Discharge and loading of all types of conventional cargo and containers to and from ships and barges. Groupage service. Licensed for handling explosives. All-through transport services by road available.

CLUBB'S MARINE TERMINAL

One berth 100m in length with a depth of water of 8.0m. Used for handling sea dredged aggregates and bulk materials. Self-discharge vessels only discharging into receiving hoppers and ship-to-shore conveyors. Storage capacity of 30,000t for aggregates.

GRANITE WHARF

A riverside berth 61m in length that can accommodate ships up to 76m in length. Depth of water, deduct 1.3m from CD. One x 200tph crane available. Minimal open storage only.

DAGENHAM NO 4 JETTY

One berth 150m in length accessed by a 40m walkway, depth alongside approx 10m below OD (Newlyn). Also a 4 dolphin barge loading facility approx 25m in length with depth approx 6.0m below Ordnance Datum (Newlyn).

TANKER TERMINALS

Situated at intervals along the lower reaches of the River Thames from Dagenham Dock, the principal terminals being beyond Gravesend Reach at Shell Haven, Coryton and Canvey Island.

CORYTON

Five jetties. Accommodates tankers and coasters. Limiting draft for Coryton 13-14m. Bunkering available at all jetties.

SHELL HAVEN

This terminal is now closed for oil operations and plans have been announced to develop the site as a container terminal. Jetties liable to silting; regular surveys and dredging of berths. All jetties fitted with loading/discharging booms.

VAN OMMEREN TANK TERMINAL LONDON BV LTD

Three berths allowing a draft of 10.5m at LW. Additionally, there is a 4,720m³ carbon dioxide terminal with a dedicated gas jetty 3km up-river at Purfleet. Storage capacity of 350,000m³, accommodating high and low flash petroleum products, chemicals and vegetable oils. Loading/discharge facilities for sea, road and rail.

GRAYS TERMINAL

Two deep water jetties, max beam unrestricted, length 228m, draft 11.2m at LW. Terminal open throughout 24 hours, having 53 tanks ranging from 1,700m³ to 20,000m³ capacity with a total storage capacity of 310,000m³ (160,000 of which is dedicated low flash). Bunker and fresh water by barge.

THUNDERER JETTY

Jetty for ocean going vessels, depth 10.0m, MLWS. Inner barge berth for fuel & gas oils and vegetable oil. Vessels can discharge at 800tph and load at 200tph. Storage capacity of 110,000m³, accommodating hard and soft vegetable and other edible oils, petroleum products, chemicals and lubricants. Extensive blending and drumming facilities.

ESSO TERMINAL

Two jetties: Jetty No 1 Currently not in service. Jetty No 2 Lubricants jetty with pigged lines. Max draft 6.9m, max length 117.4m, 8,000dwt. The Terminal has a total storage capacity for 108,000t, accommodating high and low flash petroleum products, base oils, additives and finished lubricants.

HOLE HAVEN WHARF

Jetty facilities are as follows: Max vessel LOA 220m Draft normally maintained 11.5m MLWS. With over 113 tanks ranging in size from 10 to 20,350m³, the Terminal has a total storage capacity in excess of 300,000m³. The principal products stored are petroleum products and lubricants, with facilities to also store chemicals, waxes and other specialist products. The Terminal is the only independent storage facility connected to both the GPSS and UKOP pipeline systems and has Quality Assurance Directorate for aviation fuels. Fully Licensed by Essex County Council WRA for the transportation, receipt, storage and treatment of liquid waste, slop oils and oil water mixtures.

BRUNSWICK WHARF

One berth able to accommodate ships with a length of approx 110m with manifold amidships. Max draft 5.5m at CD. Two x 8in and 1 x 6in Emco booms to 4 segregated piggyback discharge lines. All lines discharge direct to bulk liquid storage tanks.

NATIONAL GAS TERMINAL

One jetty able to accept vessels up to 300m LOA on a 97m jetty head with a minimum depth of 10.5m. There is 40,000t storage capacity, consisting of 6 x 5,000t capacity (ex LNG) tanks and 2 x 5,000t propane/butane tanks. The double skinned tanks are capable of storing LPG at -43°C. Storage: The port has vast open and warehouse storage facilities.

2.11 Ireland

2.11.1 Work package 1

2.11.1.1 Description of port sector organisation in Ireland

2.11.1.1.1 Type of ports

The principal commercial ports in Ireland are state owned companies established under the Harbours Act 1996 and 2000. Each port company has a chairman and a board of directors appointed by the Minister for the Marine. The board represents the commercial sector, labour interests and local government. The ten port companies in Ireland are:

Port of Cork Company	Galway Harbour Company
Drogheda Port Company	New Ross Port Company
Dublin Port Company	Port of Waterford Company
Dun Laoghaire Harbour Company	Dundalk Port Company
Shannon/Foynes Port Company	Wicklow Port Company

There are in addition a number of smaller commercial harbour authorities that come under the separate Harbours Act, 1946, these being: Arklow Harbour Commissioners, Baltimore and Skibbereen Harbour Commissioners, Dingle Harbour Commissioners, Kinsale Harbour Commissioners, Sligo Harbour Commissioners, Tralee and Fenit Pier Harbour Commissioners, and Bantry Bay Harbour Commissioners.

2.11.1.1.2 Port throughput

Maritime transport accounts for 99% of Ireland's imports and exports by volume, and 95% by value. In monetary terms this represents a value in excess of €130 billion passing through the Irish maritime supply chain each year. The shipping and maritime transport sector in Ireland has an estimated annual turnover of €1,275 million⁴⁰.

⁴⁰ Marine Institute (2005) Ireland's ocean economy and resources, Marine Foresight Series No. 2. Marine Institute: Galway.

Table 2-67: Total tonnage share by Ireland's main port, 2003

Tonnes (000's)	2003	2002	% Change	% Share
Dublin	16,682	15,557	7%	36%
Shannon Foynes	10,102	10,418	-3%	22%
Cork	9,176	9,042	1%	20%
Waterford	2,332	1,910	22%	5%
Rosslare	1,956	1,926	2%	4%
Drogheda	1,255	1,369	-8%	3%
New Ross	1,128	979	15%	2%
Total all ports	46,164	44,918	3%	100%

Source: IMDO, Ireland

Irish ports handled almost 50 million tonnes of goods in 2003, an increase of 3% over the previous year. Dublin, which reported a 7% increase in traffic in 2003, handled over one third (36.1%) of all commercial port traffic in Ireland. Traffic handled by the top 7 ports in Ireland is shown in the table below.

Table 2-68: Total Tonnage Share by Main Port, 2003

(000' Tonnes)		
Port	2003	% Share
Dublin	16,682	36.1%
Shannon Foynes	10,102	21.9%
Cork	9,176	19.9%
Waterford	2,332	5.1%
Rosslare	1,956	4.2%
Drogheda	1,255	2.7%
New Ross	1,128	2.4%
Other ports	3,533	7.7%
Total all ports	46,164	100.0%

Source: The Irish Maritime Transport Economist, Sept 04

2.11.1.1.3 Legislative Framework

The principal legislation for seaports in Ireland are the Harbours Acts of 1996 and 2000, which resulted in the current port company structure. Responsibility for seaports rests with the Maritime Transport Division under the Marine Minister within the Department of Transport. Also within the Department are several other maritime responsibilities such as the Irish Coast Guard, Marine Survey Office, Maritime Safety Division, Aids to Navigation Section, and Marine Environment Division.

The strategic objectives of the Irish Maritime Transport Division are:

- To provide a framework for the provision by port companies operating within the national transport chain of port services which are efficient, effective and adequate for the needs of Ireland's trading economy;
- To facilitate the availability of commercial port services which are effective, competitive and cost efficient;
- To ensure adequate infrastructure at ports to cope with growing throughput and facilitate competitive shipping services in line with assessments of national seaport capacity;
- To facilitate the coordination and integration of maritime transport within the total transport chain;
- As provided for in the Harbours Act 1996, to oversee the transfer to alternative uses under local control, of those remaining regional ports and harbours which do not form part of the national maritime transport system for trade and travel while maintaining, in transition, an appropriate corporate governance regime;
- To implement the general strategic development framework for state regional ports and harbours through transfer of ownership to port companies or local authorities;
- To expand Irish based ship ownership and ship management and to increase Irish seafarer employment;
- To sustainably increase Irish seafarer and onshore maritime sector employment.

The Governments Ports Policy Statement of 2005, based on publication of two reports⁴¹, set out the future policy direction for the port sector. That statement followed a comprehensive

⁴¹ The High Level Review of Ports (2004) carried out by Raymond Burke Consultancy, Posford Haskoning Consulting Engineers, and Farrell Grant Sparks Corporate Finance; The report of the Government established Port Estates Task Force (2004).

consultation process involving interested parties in relation to future ports policy. The Department's future strategy will be geared towards implementing the actions outlined in the policy statement. The statement seeks to better equip the port sector and its stakeholders to meet national and regional capacity and service needs.

The statement accepts that the ports industry in Ireland is deeply embedded in the state sector in terms of its current ownership/management model. Government is also very conscious of Ireland's total dependence on ports for trade, and of the need to ensure competitiveness. The Minister alluded to the possible need for a regulator to ensure fair and full competition within the ports sector. Ports were facing strong competitive forces, plus increasing specialisation, and there was a need for substantial capital funding. This had led to the need for a full re-assessment of current ports policy. Other areas of concern related to surplus outmoded port estates and the possibility of transferring such estates to local authorities to secure their amenity potential.

Features of any new ports policy are therefore likely to include an emphasis on competition, combined with good governance and accountability, together with increased private sector involvement with a more pro-active approach towards PPP's (i.e. Public Private Partnerships) and joint ventures.

One of the key challenges that lies ahead is the provision of adequate in-time port capacity, particularly for unitised (i.e. roro and lolo) trade. The Policy Statement sets out a framework intended to ensure that capacity needs are identified, planned and progressed in a coordinated manner. As an initial step in this process, the Department consulted with the commercial ports handling unitised trade to determine their view on port capacity and how they intended to deal with the projected capacity requirement. Furthermore, and to ensure insofar as possible that all possibilities concerning the provision of additional seaport capacity are fully explored and considered as part of this process, the Department intends that terminal operators at the commercial ports handling unitised trade be given the opportunity, where appropriate, to submit project proposals.

In addition, as recently as September 2005 the Department appointed consultants to:

- Refine the criteria to be used for individual project evaluation;
- Draw up a uniform template for submission of detailed project proposals;
- Assess the scope for efficiencies within existing areas of ports handling unitised trade; and,
- Advise on evaluating the projects submitted with a view to the Department's recommendations to Government.

The purpose of this process is to satisfy the government that the anticipated capacity requirement to 2014 and beyond can be efficiently and adequately met through the successful advancement and implementation by the port sector of some combination of key projects which have been the subject of an independent and expert evaluation.

Among the key issues this process is addressing will be:

- Clearer commercial mandates for the ports and their Boards;
- An urgent search for port infrastructure projects to meet future capacity needs;
- Encouragement of private sector investment;
- Better consultation and dispute resolution;
- Encouragement of mergers between ports as appropriate; and,
- Better transport policy coordination.

2.11.1.1.4 Responsibilities and Decision-Making

There are as yet no proposals to change the current regime at present, despite the government's ongoing and detailed review of the ports sector. The government's Ports Policy Statement aims to better equip the port sector and its stakeholders in order to meet national and regional capacity and service needs through a range of measures including better consultation and dispute resolution between port companies and users through appropriate information sharing and arbitration mechanisms.

However, the government expects that the market itself should decide which projects or combination of projects are completed. Direct government intervention would only arise if the market were found wanting in that regard and some level of state aid was considered essential in order to meet the national capacity requirement.

The directors of each port company are required to decide on the commercial policy for their company and it is the responsibility of port management to implement the policy. Port management prepares budgets and investment proposals for their company and these are then considered by the board of directors who are free to amend, reject or approve the proposals. When approved it is the responsibility of the management to implement.

The main responsibilities and functions of harbour companies can be described as follows:

- To provide and maintain harbour facilities;
- To ensure safe navigation within harbour waters by providing lighting and buoys, removing wrecks and maintaining approach channels of sufficient depth through dredging;
- To regulate vessel movements and berthing in the harbour;
- Licensing construction works and various port services, including stevedoring, within the harbour area; and,
- Provision of pilotage service and other harbour operations such as cargo handling.

Government has recently requested that each port prepares a detailed 5-year development plan which should include, among other things:

- Established and clear commercial and operating targets;
- Consideration of alliances such as Public Private Partnerships;
- Adoption of radical and innovative thinking in relation to funding infrastructure needs; and,
- Identification of pilot projects for design, construction, operation and financing of new infrastructure.

For the main company ports in Ireland this raises issues such as where port companies should look for investment, plus enhanced liquidity and operational partners. There is an expectation that government will give ports the necessary freedoms to independently raise, over the next 5/6 years, significant investment capital that will be required to fund essential infrastructure development. Importantly, major port companies now operate on a presumption that there will be no exchequer funding or EU Structural support available for any port.

2.11.1.1.5 Port Services

Cargo handling in major ports is carried out for the most part by independent stevedoring companies who directly employ dock labour. Cranes may be supplied by the stevedore or by the port company. Pilotage is supplied by the port companies who are also the licensing authority for pilots. Pilots may be self-employed licensees or employees of the port company. Passenger services are provided by commercial independent ferry companies, though port companies are normally responsible for handling cruise ships.

With few exceptions, ports do not employ harbour police. Irish ports have however taken all steps necessary to meet the requirements of the ISPS Code. Ports have a general policy to be environmentally friendly but it is the local government who has responsibility for the local environment. Local government provides water supply and waste reception facilities and charges for their use via local business taxes (rates). Bunkering is provided by the commercial private sector.

Irish port companies tend to be limited service providers and it is for each individual port to decide the level of its involvement, if any, in port services. This involvement may embrace port labour, cranes, harbour police, towage etc., but there is no clear overall picture of involvement on the part of ports. With some exceptions self-handling does not take place. This is mainly because of restrictive dock labour/trade union agreements, although port users would prefer to have the freedom to self-handle.

In general there is no obstacle to potential service providers gaining access to the market. Individual ports may have licensing or other requirements which would have to be met by new entrants. New entrants therefore need to enter into dialogue with the relevant port company and/or trade union representing labour interests. Authorisation and selection/appeals procedures for port services are a matter for each individual port company, but the company must comply with relevant national and/or EU legislation. Practice will vary from port to port in terms of duration of contracts, concessions and authorisations, though with most rental agreements having duration of between 9 years and 30 years.

2.11.2 WP 1a: Identification of systems for public financing in Ireland

2.11.2.1 Access Infrastructures

Access channels (including disposal of dredging material)

2.11.2.2 Navigation aids

There is a distinction within Ireland of navigation aids within designated port areas and those outside port areas. Navigation aids within port areas are usually the responsibility of the relevant port company, while navigation aids outside port areas, and more especially lighthouse services, are the responsibility of the Aids to Navigation Section within the Department of Transport. Charges are levied on vessels calling at Irish ports (i.e. 'Light Dues') to cover the cost of lights.

As in the UK, in Ireland there has also been strong pressure on the government from the shipping industry in particular to abolish the system of light dues so that the cost of the lighthouse services can be met from public funds, as in the case of most other EU countries. In the UK this has been the subject of an intensive review and an economic study of the consequences of "user pays" for navigation aids. The conclusion in the UK was that charging the user for lights did not significantly contribute to distortion of port traffic, or that if it did, there was no or little evidence to prove the case. The Irish government has made no announcement in regard to its position on light dues.

2.11.2.3 Turning basins

Construction of turning basins is the responsibility of the port company and there are no Government funds available for this expense.

2.11.2.4 Breakwaters

Construction of breakwaters is the responsibility of the port company and there are no Government funds available for this.

2.11.2.5 Roads accessing the ports and in the ports but outside terminals

Within the port, the port company itself is responsible for the provision and maintenance of roads. Roads connecting the port to the trunk road network are provided and financed by the state via the National Highways Authority.

2.11.2.6 Rails accessing the port and in the ports but outside terminals

The cost of rail infrastructure is met by the national railway company or by individual rail users/industries.

2.11.2.7 Inland waterways

A separate body within the Department of Transport is responsible for canals, albeit canals in Ireland are understood not to have any commercial cargo handling function nowadays.

2.11.2.8 Pipelines

Pipelines are almost entirely the responsibility of the private sector. Normally a charge is made for 'wayleaves' but this is a matter for commercial negotiation.

2.11.2.9 Terminal-related Infrastructures

2.11.2.9.1 Quays / docks

The port company pays for these and there is no Government subsidy.

2.11.2.9.2 Jetties

The port company pays for these and there is no Government subsidy. Dedicated jetties for the purpose of serving single users (e.g. power stations etc.) may be paid for by the company concerned.

2.11.2.9.3 Stacking yards

The port company pays for these and there is no Government subsidy. In some major ports (e.g. Dublin), the private sector terminal operator may also finance stacking yard costs in joint venture PPP with the port company.

2.11.2.9.4 Land reclamation

The port company pays for this and there is no Government subsidy.

2.11.2.10 Superstructures

2.11.2.10.1 Roads, rails on the terminal

The port company pays for this and there is no Government subsidy.

2.11.2.10.2 Terminal paving/surface finishing

The port company or private sector terminal operators pay for this and there is no Government subsidy.

2.11.2.10.3 Port/office buildings

The port company or private sector terminal operators pay for this and there is no Government subsidy.

2.11.2.10.4 Warehouses

The port company or private sector terminal operators pay for this and there is no Government subsidy.

2.11.2.10.5 Cranes

The port company or private sector terminal operators pay for this and there is no Government subsidy.

2.11.2.10.6 Mobile equipment

The port company or private sector terminal operators pay for this and there is no Government subsidy.

2.11.2.11 Operational Management

2.11.2.11.1 Direct subsidies

There are no direct operating subsidies paid to port companies.

2.11.2.12 Legal Provisions

2.11.2.12.1 Direct subsidies

There are no direct operating subsidies paid to port companies.

Grant Schemes

2.11.2.12.2 European Support

Irish ports have in the past been eligible to apply for assistance under the normal conditions of the European Regional Development Fund. However the government has made it clear that such funds are no longer available for port infrastructure.

The Irish Marine Development Office (IMDO) is helping the maritime sector in Ireland to apply for grants such as those obtainable under the Marco Polo Programme. The IMDO is also understood to be assessing the relevance of TEN-T for port infrastructure.

2.11.3 Work package 1b

INTRODUCTION

The structure of this analysis follows on from the structure and series of questions issued by Erasmus University as part of this study in its evaluation of port financing and charging practices in other countries. This approach follows a logical sequence of questions as follows:

Objective 1: *To define the port under analysis and its characteristics*

Objective 2: *To understand the governance structure of the port*

Objective 3: *To identify the financial responsibilities for investment in the seaport*

Objective 4: *To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market*

Objective 5: *To identify specific financial figures for the investment carried out by the port authority in the port*

Objective 6: *To identify specific financial figures for the investment carried out by the public sector in the port*

Objective 7: *To identify forms of public aid in the ports sector*

Objective 8: *To investigate the structure of the revenues collected to repay the funds*

Data has mainly been collected from Dublin Port Company, from the Irish Department of Transport, and from the Irish Marine Development Office. Other sources are cited as appropriate.

A conclusions section provides a summary of the analysis based on the above structured approach.

2.11.3.1 PORT OF DUBLIN

2.11.3.1.1 Characteristics of the port

Objective: To define the port under analysis and its characteristics

a) Description of the area for which the port is responsible

Dublin is the principal port in the Republic of Ireland. The port is situated at the mouth of the River Liffey, in the Bay of Dublin on the east coast of Ireland. Dublin Port comprises 260 hectares of land, over 7 kms of quayside, and has 12 miles of internal roadways.

Dublin Port Company (DPC) is the statutory port and pilotage authority for the Dublin Pilotage District. The limits of the compulsory Pilotage District are the water of the River Liffey below Butt Bridge and so much of the sea westward of the sixth meridian west longitude as lies between the parallels of latitude passing through the Baily Lighthouse on the North and through Sorrento Point on the South, including all bays, creeks and harbours and all tidal and enclosed docks within such area.

b) Type of commodities handled

Dublin is a multi-purpose port handling a wide variety of commodities and ship types. However the port specialises in unitised traffic, particularly RoRo trailers but also LoLo containers transporting all kinds of consumer and traded goods. Liquid bulk cargo also accounts for significant volumes, as does dry bulk. In addition, the port handles large numbers of trade cars, and significant volumes of tourist cars and passengers via its several ferry terminals. Cruise ship visits are also an increasingly important feature at the port.

c) Size and type of infrastructures and terminals

The navigational approach to the harbour of Dublin has a depth across the bar at MLWS of 7.8m. Vessels drawing up to 10.2m can enter the port at HW of normal tides. Vessels drawing up to 7.0m can enter at any state of tide. The inner channel/fairway of the harbour, formed by the straight channel of the River Liffey from the entrance at Poolbeg Lighthouse to Alexandra Basin is 215m wide for the greater part of its length and is maintained at a depth of 7.8m at LAT.

The river is quayed for a distance of 5.4km. Lo-lo is catered for in two dedicated lo/lo terminals and in the common work area in Alexandra Quay, which have services to and from the U.K., the Continent and the Mediterranean, in addition to worldwide transhipments. This mode accounts for 22% of the port's total throughput. There are 8 container gantry cranes at the port.

Ro-ro freight is the major segment of the port's business, however. Four ferry companies operate up to 16 sailings daily to the UK, connecting Dublin to Heysham, Holyhead, Liverpool, Douglas and there is also a less frequent connection to Cherbourg. These sailings cater for both the freight and tourism markets.

In the 6 years up to 2005 over €85m has been invested in port facilities with the major share of this going into the ro-ro sector. This investment is scheduled to continue to ensure that customers have the benefit of state-of-the-art facilities.

There are some 5km of usable quayside in the port. The newer downstream container terminals consist of some 1.5km of quay in total. The port offers seven RoRo ramps at its various ferry terminals.

In the bulk sector, loading and discharging facilities for concentrate, peat, coal, grain, animal feed-stuffs, fertilizer, sand, etc. are provided at sites both northside and southside of the river. A conveyor and ship loading facility connects the Alexandra Terminals storage shed to vessels on the Dry Bulk Jetty in Alexandra Basin. The jetty is used for the loading-out of lead and zinc concentrate from Tara Mines. Electric portal grabbing cranes of 4, 10 and 20 tonnes capacity, conveyors and hoppers are available in different locations for all other dry bulk cargoes. 2 x 64 tonne and 1 x 105 tonne mobile cranes (the latter privately owned) are also available, and there is privately owned storage for up to 1,000,000 tonnes of grain, animal feed, etc.

d) Annual throughput

Dublin provides the principal sea access for Ireland. The Port of Dublin handled approximately 73% of Ireland's RoRo traffic and 66% of LoLo container traffic in 2001⁴².

In 2003 Dublin handled a total of 23.54 million tonnes of cargo, an increase of 1.3 million tonnes (6%) compared to 2002. The port handled 571,250 RoRo units, plus 496,000 teu in

⁴² <http://www.igi.ie/docs/conf-spatial-2003/Fitzsimons/National%20Road%20Infrastructure%20and%20Spatial%20Planning.ppt>

containers. Liquid bulk accounted for 3.5 million tonnes, and dry bulk 1.7 million tonnes. The port also handled 101,000 trade cars, 336,500 tourist cars and 1.42 million passengers. Altogether the port received 7,917 trading vessels during 2003.

Almost 60% of Dublin's throughput by tonnage (i.e. 13.5 million tonnes) relates to RoRo cargo carried by ferry, with a further 20% (4.7 million tonnes) by LoLo container, implying that close to 80% of Dublin's throughput comprises unitised cargo. A variety of bulk cargoes make up the remaining 5.3 million tonnes (22%).

Table 2-69: Dublin Port Throughput Statistics, 2003

	000 Tonnes	% Share
RoRo	13,565	57.6%
LoLo	4,685	19.9%
Bulk Liquid	3,477	14.8%
Bulk Solid	1,704	7.2%
Break Bulk	109	0.5%
Total	23,540	100.0%
RoRo Units	571,000	
LoLo TEU's	496,000	

Source: DPC Annual Report and Financial Statements, 2003

e) Operating under private or public law

Dublin Port Company (DPC) is a self-financing, semi-state organisation whose business is to facilitate the flow of goods, passengers and attendant tracking information through the Port. Under the provisions of the Harbours Act 1996, the company took over the functions carried on by the former Dublin Port and Docks Board on 3rd March 1997 ("Vesting Day"). The cost to the company of the assets acquired on Vesting Day was determined by the Minister for Communications, Marine and Natural Resources. Liabilities (including pensions and capital grants) were taken over at their actual or determined amounts. Pension liabilities include those in respect of pre-Vesting Day pension entitlements of the Company's employees and the current and deferred pensioners of its predecessor entity, Dublin Port and Docks Board. The assets and functions of the Pilotage Committee, originally established under the Pilotage Act 1913, were transferred by operation of law to DPC in July 1997.

f) Port authority ownership

DPC is wholly owned by the Irish Government. The consideration for the net assets transferred by the company was satisfied by the creation and issue of 6.023 million ordinary shares of IR £1 (€1.27) each fully paid. One ordinary share is held by the Minister for Finance and the remainder are held by the Minister for Communications, Marine and Natural Resources.

2.11.3.1.2 Governance structure of the port

Objective: To understand the governance structure of the port

a) Roles of the Ministry, city and port authority

2.11.3.1.2.1 Role of the Ministry

The principal legislation for seaports in Ireland are the Harbours Acts of 1996 and 2000, these resulting in the current port company structure (i.e. corporatisation). Responsibility for seaports rests with the Maritime Transport Division under the Marine Minister within the Department of Transport. The strategic objectives of the Irish Maritime Transport Division are:

- To provide a framework for the provision by port companies operating within the national transport chain of port services which are efficient, effective and adequate for the needs of Ireland's trading economy;
- To facilitate the availability of commercial port services which are effective, competitive and cost efficient;
- To ensure adequate infrastructure at ports to cope with growing throughput and facilitate competitive shipping services in line with assessments of national seaport capacity;
- To facilitate the coordination and integration of maritime transport within the total transport chain;
- As provided for in the Harbours Act 1996, to oversee the transfer to alternative uses under local control, of those remaining regional ports and harbours which do not form

part of the national maritime transport system for trade and travel while maintaining, in transition, an appropriate corporate governance regime;

- To implement the general strategic development framework for state regional ports and harbours through transfer of ownership to port companies or local authorities;
- To expand Irish based ship ownership and ship management and to increase Irish seafarer employment;
- To sustainably increase Irish seafarer and onshore maritime sector employment.

A Government Ports Policy Statement of 2005 set out the future policy direction for the port sector. The Department's future strategy will be geared towards implementing the actions outlined in the policy statement. The statement seeks to better equip the port sector and its stakeholders to meet national and regional capacity and service needs. Features of any new ports policy are likely to include an emphasis on competition, combined with good governance and accountability, together with a focus by port companies such as DPC on securing increased private sector involvement with a more pro-active approach towards PPP's (Public Private Partnerships) and joint ventures.

One of the key challenges that lies ahead is the provision of adequate in-time port capacity, particularly in respect of unitised trade. The Policy Statement sets out a framework intended to ensure that capacity needs are identified, planned and progressed in a coordinated manner. As an initial step in this process, the Department consulted with the commercial ports handling unitised trade to determine their view of port capacity and how they intended to deal with the projected capacity requirement. Furthermore, and to ensure insofar as possible that all possibilities concerning the provision of additional seaport capacity are fully explored and considered as part of this process, the Department intends that terminal operators at the commercial ports handling unitised trade be given the opportunity, where appropriate, to submit project proposals.

In September 2005 the Department appointed consultants to:

- Refine the criteria to be used for port project evaluation;
- Draw up a uniform template for submission of detailed project proposals;
- Assess the scope for efficiencies within existing areas of ports handling unitised trade; and,
- Advise on evaluating the projects submitted with a view to the Department's recommendations to Government.

The purpose of this process is to satisfy the Government that the anticipated capacity requirement to 2014 and beyond can be efficiently and adequately met through the successful advancement and implementation by the port sector of some combination of key projects which have been the subject of an independent and expert evaluation.

Among the issues the process is addressing are:

- Clearer commercial mandates for the ports and their Boards;
- An urgent search for port infrastructure projects to meet future capacity needs;
- Encouragement of private sector investment;
- Better consultation and dispute resolution;
- Encouragement of mergers between ports as appropriate; and,
- Better transport policy coordination.

2.11.3.1.2.2 Role of Dublin Port Company

Decisions concerning facilities within and access to the port are the responsibility of DPC. DPC essentially operates as a landlord port, providing terminals, plus cranes and warehouses for rent to terminal operating companies, ferry operators, and other port users.

In regard to port expansion, DPC must apply to Government for permission to develop new capacity. In keeping with a commitment made in December 2001, DPC recently submitted a new application for approval and consent under the Foreshore Acts 1933 - 1998 to carry out the necessary reclamation works to facilitate an extension of Dublin Port. A new Environmental Impact Statement accompanied this application.

There are as yet no proposals to change the current regime at present, despite the government's detailed review of the ports sector. The government's Ports Policy Statement aims to better equip the port sector and its stakeholders in order to meet national and regional capacity and service needs through a range of measures including better consultation and dispute resolution between port companies and users through appropriate information sharing and arbitration mechanisms.

However the government expects that the market itself should decide which projects or combination of projects are completed. Direct government intervention would only arise if the

market were found wanting in that regard and some level of state aid was considered essential in order to meet the national capacity requirement.

The directors of DPC are appointed by the Minister, and the directors decide on the commercial policy for the port and it is the responsibility of port management to implement the policy. Port management prepares budgets and investment proposals for the company. These are then considered by the board of directors who are free to amend, reject or approve the proposals. When approved it is the responsibility of the management to implement.

Government has requested that DPC and other Irish company ports prepare a detailed 5-year development plan which will include, among other things:

- Establish clear commercial and operating targets;
- Consider alliances such as Public Private Partnerships;
- Adopt radical and innovative thinking in relation to funding infrastructure needs; and,
- Identify pilot projects for design, construction, operation and finance of new infrastructure.

For DPC this raises issues such as where it should look for investment, enhanced liquidity and operational partners. There is some expectation that government will give ports the necessary freedoms to independently raise, during the next 5/6 years, significant investment capital that will be required to fund essential infrastructure development. DPC and other major Irish port companies now operate on a presumption that there will be no exchequer funding available for any port.

2.11.3.1.2.3 Role of local authority

The Board of DPC contains representatives from industry, local government and port labour. Local government provide various services to the port (e.g. waste collection, water services etc.) for which it charges the port municipal rates (i.e. local taxes). Dublin City Council has levied full rates on DPC dating back to 1998. However, in accordance with the provisions of the Local Government (Dublin) Act, 1930 DPC paid only at a rate of 21% of this amount. DPC appealed the rates assessments and a High Court decision issued on 30th October 2002 confirmed the Port Company's position. In line with the provisions of the Valuation Act 2001 the Company is now liable to full rates with effect from 1st January 2003. DPC has appealed the quantum of that assessment and the matter is to be decided by a Valuation Tribunal.

DPC works closely with the Dublin City Council on major infrastructure projects of common interest such as the construction of Dublin Port Tunnel, for which 34 acres of port land were compulsory acquired from DPC. During 2003 DPC received €32.5 million in respect of the permanent lands acquired, approximately 22 acres. The remaining 12 acres revert to DPC on completion of the tunnel works. DPC also participate in the Council controlled East-Link Toll Road Scheme, which opened in 1984. Under agreements dating from 1983, for consideration of the loss of limited berthage and the disposal of certain lands, the then Board (now DPC) acquired the right to participate in the future profits of the Toll Scheme for a period of not less than 25 years. Income to DPC from the East-Link Toll Scheme in 2003 amounted to €991,000.

b) Boundaries between port and maritime administrations

DPC is responsible for all investments (infrastructure and superstructure) made within the port area. However, the need for future port capacity is also being closely monitored by central government, through the Maritime Transport Division, with shipping and port matters subsumed within the Department of Transport.

At the national level, looking ahead to 2014, research has indicated that projected traffic will increase by almost 16 million tonnes, some 35% more than the tonnage handled in 2003, and that there will be a shortfall in capacity of approximately 12 million tonnes overall, of which some 4.4 million tonnes relates to unitised trade⁴³. The government are considering the implications of this for each port, including Dublin.

c) Port governance model

DPC is essentially a corporatised state-owned port authority, operating at arms length from government, and employing a landlord approach with regard to port operations, though also providing certain services itself (e.g. pilotage, towage). Thus, most of the terminal operations and activities within the port are undertaken by privately-owned entities under contractual arrangements with DPC as landlord. Corporate governance requirements as laid down by central government for all state owned companies including DPC, must be complied with.

d) Roles of the public and private sectors within the port

Eight private companies are licensed by DPC to offer stevedoring services in the port. These are:

⁴³<http://debates.oireachtas.ie/DDebate.aspx?F=SEN20050413.xml&Dail=29&Ex=All&Page=13>

- Dublin Ferryport Terminals (owned by Irish Continental Group)
- Dublin Port Stevedores Ltd
- Marine Terminals Ltd (owned by Mersey Docks & Harbour Company)
- Norse Merchant Ferries (owned by Norfolk Line/A P Moller Group)
- Poolbeg Stevedoring
- Portroe
- P&O Irish Sea (owned by P&O Group)
- Stena Line (owned by Stena AB)

Private terminal operating companies are responsible for terminal operations including recruitment of personnel. DPC derived income from licenses in 2003 amounted to €563,000. Similar to most major seaports in the EU, the Port of Dublin has 'rightsized' (as well as corporatised) over the last few decades, and in 2003 the total number of DPC employees stood at 291.

Nevertheless, the profitability of ports is being challenged by Government and in future DPC and other Irish ports will need to make their own investments without access to exchequer or EU support. Reflecting this new environment, the Ministry's capital budget for all seaports in 2004 stood at just €13.3 million.

e) Public/private nature of marine services

Certain port services such as pilotage and towage are provided by DPC and these services depend entirely on private investments made by DPC itself. Stevedoring and terminal operations are licensed to private operators as noted above.

2.11.3.1.3 Investment responsibilities: Body or institution financially responsible for the different types of investment and their maintenance

Objective: To identify the financial responsibilities for investment in the seaport

a) Access infrastructure

Decisions concerning maritime access to Dublin Port are made by DPC itself. Prior to 1989 the cost of capital dredging works (with certain isolated exceptions) was paid for by the port itself. Since 1989 the port has received financial assistance for approved projects from EU Structural Funds (i.e. European Regional Development Fund (ERDF), Cohesion Fund, European Investment Bank (EIB)). As already noted, funding of this nature is no longer available to DPC.

In respect of land transport infrastructure costs, within the port area this is entirely the responsibility of DPC. However, any private rail sidings are the responsibility of the companies concerned. Bridges are the responsibility of the local authority. Linkages to the port such as the new Dublin Port Tunnel and M50 road improvement scheme are the responsibility of the National Roads Authority, in cooperation with Dublin City Council. Approximately 1.0 million tonnes of cargo (i.e. 4% of throughput) uses rail for access to/from the port, which means the vast majority of traffic requires road access.

There is one canal that is the responsibility of another public body, but which is no longer used for commercial traffic. Ferries are owned and operated by private companies. Common user pipelines are jointly financed by DPC and the private sector companies involved, with other dedicated pipelines financed solely by the private sector.

b) Terminal-related infrastructure

Civil works within the port area that allow the supply of services to ships and cargoes in the context of any specific terminal or operator – e.g. quays, jetties, finger piers, specific mooring assets etc. are all the responsibility of DPC. Decisions concerning all items of harbour infrastructure are made by DPC.

DPC has assessed that, on the basis of its current and projected throughput of imports and exports, it will reach operational capacity by 2007. From the end of 2007, DPC will not have adequate facilities to deal with the volume of business generated by its customers. The company does not have control over significant tracts of land at the port, which is held by tenants under long leases. DPC has endeavoured to recover some land from tenants but this has been costly, slow and difficult and compounded by inappropriate landlord-tenant legislation. DPC are also faced with the challenge that much of the land currently held on long leases is remote from the deep-water berths that are so urgently required.

c) Terminal superstructure and equipment

Decisions concerning most items of superstructure in Dublin Port are made by DPC and paid for by them. Surface arrangements, paving and buildings, mobile and fixed equipment – paving/surfacing, terminal lighting, parking areas, gates and fences, sheds, warehouses and stacking areas, tank farms and silos, offices, repair shops, other buildings, are mostly provided by DPC. However, cargo handling equipment at the specialised unitised terminals, such as cranes, straddle carriers, vehicles, other cargo handling equipment – are mainly for the account of private port tenants.

DPC has introduced joint venture PPP investments in the port. A new LoLo berth capable of handling 1,500 TEU vessels was completed in 1999 in a 50-50 joint venture between DPC and Coastal Container Line⁴⁴. Dublin container terminal operator Marine Terminals Ltd (MTL), subsequently purchased by Coastal, invested a further €17 million in the terminal during 2001-2002. This involved expansion of the existing 15.5 hectare terminal with 700m long quay, to take in an adjoining area that tripled storage capacity from 2000 TEU to 6500 TEU, including five new widespan rail mounted gantry cranes. The development programme also increased the length of quay offering a depth of 10.2m from 400m to 570m. The other 130m of berth provides a minimum depth of 8.5m.

2.11.3.1.4 Financing structure

Objective: To identify the financing structure and the conditions under which the responsible parties provide finance for investments in the port and to establish if these structures and conditions are similar to those of the market

a) The financing body

Since 1997, DPC has invested more than €136 million on infrastructure improvements. DPC claims it did so without seeking any exchequer funding. In the six years between 1997-2003 over €85m has been invested in port facilities with the major share of this going into the ro-ro sector. This investment is scheduled to continue to ensure that customers have state-of-the-art facilities to enable them to succeed in a competitive market place. Continued DPC investments in the ro-ro sector are being complemented by shipping line investment in new ships:

- In January 2001 P&O Irish Sea introduced the new European Ambassador to the Dublin to Liverpool route;
- In March 2001 the new Irish Ferries superferry Ulysses went into service on the Dublin to Holyhead route;

⁴⁴ Ocean Shipping Consultants (2000), *The Global Containerport Market to 2015*, P. 122.

- In April 2001 Stena Line's new Stena Forwarder entered service on the Dublin Holyhead route;
- Stena Line introduced a new ferry, the Stena Adventurer, in June 2003.

Based on traffic growth forecasts, and the government's prediction of a shortfall of port capacity by 2014⁴⁵, there is therefore believed to be a need for Dublin and other major ports in Ireland to increase capacity accordingly. The Minister has in turn urged major ports to bring forward port expansion schemes as soon as possible, with a focus on minimising the exchequer costs.

The Minister has never asked for dividends from DPC but is keeping this option under review.

At 31st December 2003, DPC's tangible assets were valued at €208.5 million, of which 66.3% (i.e. €138.3 million) related to terminals, and 28.9% (€60.3 million) related to other port land and estates. The valuation of tangible assets takes into account the cost to the DPC of assets acquired on Vesting Day as determined by the Minister, with subsequent additions stated at purchase cost.

DPC, similar to other ports in Ireland, has in the past received considerable grant aid from EU Structural Funds. Deferred income in the form of capital grants and contributions to fixed assets showed a closing balance for 2003 of €18.8 million.

Table 2-70: Dublin Port Company Tangible Asset Net Book Amounts, 2003 (€000's)

Land and buildings	Terminals	Dock structures dry docks and quays	Floating craft	Cranes	Plant and Machinery	Total
43,036	138,298	17,339	4,754	2,556	2,541	208,524
20.6%	66.3%	8.3%	2.3%	1.2%	1.2%	100.0%

Source: DPC Annual Report and Financial Statements, 2003

⁴⁵

<http://www.transport.gov.ie/NR/rdonlyres/B8639A8B-37A6-4048-97CC-EA682222FB88/0/PortPolicyStatement2005.pdf>

An additional funding amount of €4.6 million was received by DPC in 2003 from ‘the shareholder’ (i.e. the Minister) subject to issuance of 3.7 million additional ordinary shares of €1.25. This amount was submitted to DPC as part of the National Development Plan’s contribution to two future port projects, the latter involving total capital investment of €23.0 million, with the port itself finding the remainder of the required capital⁴⁶.

An infrastructure project of major significance to DPC is the Dublin Port Tunnel, currently nearing completion. The Dublin Port Tunnel is a huge underground dual carriageway, one of the largest of its kind in Europe. Its goal is to allow trucks to get from Dublin Port to the M1 and M50 motorways. The quick facts are:

- The M1 motorway runs from Dublin to Belfast;
- The M50 motorway circles the city and connects to the main roads out of Dublin;
- Dublin Port is Ireland’s principal port;
- Trucks will access the tunnel at Dublin Port and at Santry on the M1 motorway.

Previously all trucks coming from or going to Dublin Port have had to travel through Dublin city centre, causing extra traffic, pollution and noise. The tunnel is designed to produce 9,000 fewer journeys by lorries on Dublin’s streets every day, which should make it a more pleasant place to shop in and walk around. The Tunnel will be tolled for non-truck traffic (e.g. cars etc.) but not for trucks.

Dublin City Council is building the tunnel on behalf of the National Roads Authority, which is paying for it using money raised through taxes. Three engineering companies are working together to build the tunnel.

The Dublin Port Tunnel involves very substantial government investments, together with the M50 road and its projected upgrade, improvements to the M1, and the improvement of traffic management in the Greater Dublin Area generally. The Tunnel represents a key part of the government’s solution to reduce road congestion, which for Dublin alone is estimated to cost €2.5 billion per annum⁴⁷. The Tunnel will remove thousands of trucks a day that trundle through the city centre streets to Dublin Port, giving Ireland’s premier port a direct motorway connection into its heart. The Port Tunnel is expected to open in 2006.

⁴⁶ A & L Goodbody Consulting (2004), *Public Infrastructure in Ireland – Projects and Prospects*. www.algoodbody.ie/consulting

⁴⁷ A & L Goodbody Consulting (2004) *Dublin’s Infrastructure Investment requirement, 2020*, Dublin Chamber of Commerce

Together with land and property compensation, supervision costs and other miscellaneous costs, the estimated all in cost of the Tunnel project is €750m⁴⁸. Whilst DPC will directly benefit from the Tunnel's improved access (as will the city), DPC has also received a cash windfall in respect of compensation for loss of port land and berthage due to Tunnel construction. DPC received €32.5 million in respect of this land giving a profit on disposal of €30.5 million and shown as exceptional income in its 2003 Profit & Loss Account. This in turn resulted in a DPC retained profit for 2003 of €45.2 million (compared with a more typical €9.4 million profit in 2002 and €9.3 million in 2004). Consequently, finance charges of €5.0 million in 2004 were 26% less than in 2003, this reflecting reduced borrowings in 2004 following the receipt of CPO (Compulsory Purchase Order) proceeds relating to the port tunnel and a reduction in pension fund deficit financing costs. This transaction therefore involves:

- The state paying another state-owned organisation (i.e. DPC) €32.5 million for loss of port land to allow the Tunnel's construction;
- The state also paying €750 million for a new port Tunnel and port access road which is provided free for trucks entering and leaving port, but is tolled for car users.

In regard to port operations, 8 private companies are licensed by DPC to offer stevedoring services in the port. These companies and their investments (some of which are estimated) in the port during 2003 are as shown in the table below.

Table 2-71: Dublin Port private licensed terminal operators and their estimated capital investments, 2003

Terminal Operator	Items	2.11.3.1.5 Capital cost (€ Million)
Dublin Ferryport Terminals	Cranes	€11.0
Dublin Port Stevedores Ltd		€1.0
Marine Terminals Ltd	Crane; storage facility	€10.0
Norse Merchant Ferries	Handling equipment	€0.5
Poolbeg Stevedoring		€0.5
Portroe Stevedores Ltd	Mobile crane	€3.0
P&O Irish Sea		€0.5
Stena Line		€0.5
Total		€27.0

Sources: Based on information in company accounts and own estimates

⁴⁸ <http://www.mercury.ie/?id=5§ion=41&sub=36>

Total private sector investment (i.e. non port authority) in Dublin Port during 2003 is estimated to be €27.0 million. Major investments were made by Dublin Ferryport Terminals (part of Irish Continental Group), and Marine Terminals Ltd (owned by Mersey Docks & Harbour Company), with significant investments also made by Portroe Stevedores Ltd. There being no other major investments made in the port during 2003 (apart from DPC's already noted investments), other terminal licensees are assumed to have incurred only limited capital investment costs related to either equipment or buildings.

b) The party that contracts the debt

DPC contracts debt for its own port infrastructure investments. Many of DPC's port tenants also make their own investments, again using private capital.

c) Repayment conditions

Not applicable.

d) Are repayment conditions similar to market ones?

Repayment conditions are based on commercial lending market requirements.

e) Are these conditions similar to those given to other infrastructure projects?

Conditions will be similar to other private infrastructure projects.

2.11.3.1.6 Specific financial figure for types of investment and for which the financial responsibility falls on the port authority

Objective: To identify specific financial figures for the investment carried out by the port authority in the port

DPC made investments totalling €15.8 million in tangible assets in 2003, almost all of which related to fixed assets. Of this, almost 75% (€11.8 million) was in terminals, with a further 18.3% in other land and estates. These investments are financed by a combination of retained earnings and medium or long-term loans. As of 31st December 2003, DPC's outstanding repayable loans totalled €91.9 million (of which bank loans were €87.5 million or 95%), these being secured on various assets of the company. Interest paid by DPC during 2003 amounted to €3.0 million.

Table 3-72: Dublin Port Company Additions to Tangible Assets, 2003 (€000's)

Land and buildings	Terminals	Dock structures dry docks and quays	Floating craft	Cranes	Plant and Machinery	Total
2,468	11,802	432	0	0	1,076	15,778
15.6%	74.8%	2.7%	0.0%	0.0%	6.8%	100.0%

Source: DPC Annual Report and Financial Statements, 2003

2.11.3.1.7 Specific financial figure for types of investment and for which the financial responsibility falls on a public body other than the port authority

Objective: To identify specific financial figures for the investment carried out by the public sector in the port

There were no investments made by any other public body in the port during 2003.

2.11.3.1.8 Financial aid received by the port authority from national, regional, local authorities

Objective: To identify forms of public aid in the ports sector

- a) Compensation for operating losses.

DPC receives no compensation for operating losses. Port Companies such as DPC must comply with the requirements of the Companies Act and necessary Auditing related requirements.

b) Provision of capital by public bodies.

An additional funding amount of €4.6 million was received by DPC in 2003 from the shareholder (i.e. the Minister) subject to issuance of 3.7 million additional ordinary shares of €1.25. Other sources indicate this amount was submitted to DPC as part of the National Development Plan as a contribution to two future port projects, the latter involving total capital investment of €23.0 million, with the port itself funding the remainder⁴⁹.

c) Non-refundable grants or loans on privileged terms provided by public bodies in 2003.

The DPC accounts show that the company has long-term borrowings of €4.4 million from a 'Local Loans Fund'. The rate of interest for these loans is set by reference to market rates and is re-set every six months. The total loan amount is equivalent to below 5% of all outstanding bank loans at end 2003. The Local Loans Fund Act (1935) provided for the setting up of a fund from central government funds to provide long term loans to local authorities and other public bodies. Loans of up to 35 years may be granted and at a rate somewhat below current bank rates.

d) There was no foregoing of profits or foregoing the recovery of sums due.

e) Foregoing a normal return on public funds used does not apply.

f) Compensation for financial burdens imposed by public agencies.

During 2003 DPC received compensation for loss of port land and berthage (obtained via Compulsory Purchase Order) in regard to construction of the Dublin Port Tunnel. DPC received €32.5 million from the government in respect of this land giving a profit on disposal of €30.5 million and shown as exceptional income in the 2003 Profit & Loss Account. In the DPC's 2004 accounts it is stated that half of the proceeds (€17.5 million) were used to reduce borrowings, and the other half (€17.5 million) was allocated as an accelerated contribution to the company pension fund. This gives a somewhat different total of €35.0 million. Nevertheless, the outcome is a positive impact on the net current asset position within the company's balance sheet.

⁴⁹ A & L Goodbody Consulting (2004), *Public Infrastructure in Ireland – Projects and Prospects*. www.algoodbody.ie/consulting

- g) Exemption from general forms or levels of tax relief on profit, investment or property income taxes, VAT, local taxes, etc.

Up until end 2002, DPC paid only 21% of full rates (local taxes) to Dublin City Council, this arrangement conforming to provisions of the Local Government (Dublin) Act, 1930, as upheld by a High Court decision issued 30th October 2002. However DPC is now liable to full rates with effect from 1st January 2003. Local taxes for DPC therefore subsequently increased from €0.9 million in 2002 to €3.8 million in 2003.

DPC pays Corporation Tax on the full profits of port related activities and the company is also liable to tax on non-port activities. The tax charge for 2003 was initially estimated to be €240,000, though subsequently restated as €1.9 million (€1.5 million in 2002, and €2.0 million in 2004).

DPC had a depreciation charge of €8.0 million in 2003 (€7.8 million in 2002). DPC incurred redundancy payments for 2003 amounting to €2.1 million.

2.11.3.1.9 Sources of revenue of the port authority

Objective: To investigate the structure of the revenues collected to repay the funds

Revenue (turnover) for DPC in 2003 amounted to €54.7 million, up from €51.9 million in 2002. At least 97% of revenues are derived from port user charges. Port dues account for 84.1% of revenues (€46.0 million), with rents accounting for 12.1% (€6.6 million), and operating licenses 1.0% (€563,000). The port also earned almost €1.0 million through its participation in the East-Link Toll Road Scheme, though this income will cease around 2009.

Table 3-73: Dublin Port Company Turnover, 2003

Class of business	€000's	% Share
Port dues	46,025	84.1%
Rents	6,631	12.1%
East-Link Toll Road	991	1.8%
Licenses	563	1.0%
Other	489	0.9%
Total	54,699	100.0%

Most of DPC's income is therefore obtained by levying Tonnage Rates on gross tonnage of ships using the port, and also by charging Goods Rates on goods entering and leaving the port, plus pilotage and towage fees (though these latter aspects are not separated out). Significant income is also generated through land and property lettings. Port dues and charges are fixed by the port itself, subject to the consent of the Minister for the Marine.

Much of the remaining 'other' income (i.e. €489,000) is believed to relate to profit derived from DPC's joint ownership of Renore Ltd., a bulk cargo handling concern operating within Dublin Port⁵⁰.

There are no specific requirements as to rate of return on projected port investments or on the port authority's assets as a whole. DPC is free to make its own decisions in this area.

2.11.3.2 Conclusion

Dublin Port Company (DPC) acts as a commercially oriented port, with a focus on raising its own capital and recovering costs from user charges. Like most former public port authorities, the port company administers a very large and valuable land estate, and which includes several modern marine terminals that have benefited from substantial EU structural support over the relatively recent past. The new reality, however, is that EU structural funds or funding from the Irish exchequer are no longer available and over the last several years DPC has had to find its investment capital from other sources, normally via bank loans or through private terminal operators investing in their own handling equipment. The Irish government's ongoing review of major ports is increasingly favouring the use of PPP's to help increase port capacity, and government may also establish some form of port regulator to ensure a competitive ports sector in future. Nevertheless, during 2003 DPC appears to have received some advantageous state 'support' in one form or another, for example via the Minister's further acquisition for cash of shares in the company, through the sale of port land to the government in respect of the Dublin Port Tunnel (the latter also a major 'free' access enhancement for the port and its users), as well as some respite in respect of local taxes, albeit the latter advantages are now no longer available to the same extent as they were. On the other side of the coin, DPC has inherited from its predecessor a problematic pension deficit situation, which it has done well to manage, and the need for redundancy payments has continued, although this burden may be expected to reduce in future.

⁵⁰ DPC Annual Report and Financial Statement, 2003, p. 34.

2.11.4 WP 2: Identification of charging practices for ports in Ireland

The main income of Irish port companies (i.e. port authorities) consists of revenues from port dues levied on ships, cargo and passengers, and from land rented or leased to private terminal operators. In the Port of Dublin, which is the largest port in Ireland accounting for over one third of the Irish seaport sector by tonnage, port dues in 2003 accounted for 84.1% of revenue (\$46.0 million), and port rents for 12.1% of revenues (€6.6 million).

2.11.4.1 Charging practices to terminal operators at national level

Port land is leased and and rented by the corporatised port companies to the private sector. The duration of individual agreements typically ranges from 9 years up to 30 years. Fee levels are based on the land area involved and also the quality of the facilities and investment requirements. Longer term port leases can involve private actors also making investments in cargo handling equipment. In Dublin, private investments in handling equipment totalling more than €20.0 million were made by the main container terminal operator Marine Terminals Limited between 2000-2004.

Private terminal operating companies are responsible for all terminal operations including recruitment of personnel. Port companies also receive license fees from licensed stevedores. In Dublin, there are 8 licensed stevedores and the Dublin Port Company derived income from licenses in 2003 amounting to €563,000.

Port companies are not subject to any controls on rents to be fixed for new leases of land to port users but leases of over 10 years duration are subject to the consent of the Minister for the Marine. The Minister has expressed views on the level of rent proposed for such leases on the basis that rent for port leases should reflect market rents.

The commercial orientation and financial performance of Irish ports is being challenged by the government and today all Irish ports generally need to make investments based on private capital, including bank loans, and without access to exchequer or EU financial support. This means Irish seaports must fully recover the costs of their investments from user charges such as rents and port dues (see below). Reflecting this changing environment, the Transport Ministry's capital budget for all the country's seaports in 2004 stood at just €13.3 million.

2.11.4.2 Charging practices to ship operators at national level

2.11.4.2.1 Tonnage Rates

Port companies in Ireland generate income by levying Tonnage Rates based on the gross tonnage of ships using their port. There are discounts available for frequent port users such as ferry services and container lines. Certain classes of vessels (mainly non-commercial, naval and pleasure craft) are usually exempt from tonnage dues. Increases in port dues and certain other charges are effected by Harbour Rates Orders made by the Minister for the Marine. Changes to certain service charges (e.g. pilotage, towage etc.) are also subject to his consent.

2.11.4.2.2 Goods and Passenger Rates

Goods and Passenger Rates are applied to all goods and passengers entering or leaving the port by ship. Generally rates differ for specific bulk commodities. For major unitised and passenger traffic providers (e.g. ferry lines) the rates may be negotiated between the port companies and the carrier involved. Passenger Rates apply to ferries and cruise ships visiting the port.

2.11.4.2.3 Light Dues

Light Dues are levied by the Aids to Navigation Section within the Department of Transport (The Ministry). Charges are based on ship gross tonnage and are levied on any commercial ship calling at an Irish port. The level of Light Dues is decided by the Ministry with the aim of fully recovering the cost of Irish Lights.

2.11.4.2.4 Pilotage Fees

Pilotage is the responsibility of port companies who either provide this service in house or license it to self-employed pilots. Pilotage Fees are assessed on the basis of ship gross tonnage and also the time taken for each pilotage act. Each port company is the statutory port and pilotage authority for its own defined area and ports therefore administer and control this function up to the limits of their compulsory Pilotage District. As the main business in ports such as Dublin is ferry/ro-ro activity, and as such vessels tend to be very frequent users of the port (i.e. daily or twice daily), they tend to have pilotage exemption certificates after examination and other requirements are met.

2.11.4.2.5 Towage

Some port companies provide towage themselves (e.g. Dublin) whilst in other ports this is provided by private companies under license. Towage Rates are applied based on the ship size, amount of time involved, and number of tugs required.

2.11.4.2.6 Mooring Fees

Mooring and mooring fees are generally the responsibility of each terminal operator and particularly so in the case of ro-ro terminals. For mooring at port company berths the port authority imposes a mooring charge to cover its costs in this respect.

2.11.5 Conclusions

Legislation has enabled former public ports in Ireland to be corporatised (after 1996) into commercially oriented 'company ports'. Company ports are today required to finance port expansion and investment schemes themselves or in joint ventures with private sector organisations. Company ports operate on the principle that they will not be able to access resources from either the Irish exchequer or from EU structural funds. Recent port policy statements reaffirm this position, and also highlight the need for prioritisation of port projects that are of national significance based on PPP, as well as the need for improved regulation of the ports sector to ensure effective competition and increased efficiency. Consequently charging practices within Irish ports reflects the fact that all port investment and operating costs must now be fully recovered from user charges.

2.12 Belgium

2.12.1 The Belgian port sector

2.12.1.1 Main traffic characteristics

Belgium is home to a number of large international seaports: Antwerp, Ghent, Zeebrugge and Oostende (Ostend); all situated in Flanders. Each of these seaports has its own specialities and strong points. The “mainport function” is mainly borne by the port of Antwerp, since it represents two thirds of the goods handled in the Flemish ports. This port occupies a very important position in the Le Havre-Hamburg range for almost all important traffic flows. Dry and liquid bulk represent more than half of its total traffic; besides which the port of Antwerp is the market leader for conventional cargo (e.g. iron and steel, fruit, non-ferrous metals, timber, fertilisers, flour, sugar) and occupies a top position in container handling. The success of “conventional cargo” in Antwerp is due to a long tradition of expertise in this market sector and the presence of state-of-the-art specialised terminals. As for the container traffic, the spectacular growth is to be attributed to Antwerp’s cargo generating capacity, its modern infrastructure, reliable service, and the high handling productivity of its terminals. In the last decades, several dredging programmes for the river Scheldt have been in operation. These programmes guarantee the optimal accessibility for the latest generation of container ships and optimise the general accessibility of the port. The construction of the Deurganckdock at the left bank of the river Scheldt will moreover double the handling capacity of the port (+ 6 million teus), offering a long term perspective for large container shipping companies.

Like Antwerp, the port of Ghent is situated inland. This port has mainly focused on the consolidation of its traditional traffic and the further development of specialised kinds of traffic (e.g. fruit juices, fruit, cement, china clay, scrap iron, cars and steel products). The port has opted for a niche strategy, and aims at a natural complementarity for most of the goods flows. In the context of this strategy, a new and modern infrastructure, the “Kluizendock”, is being built, which will allow future developments to take place under optimal conditions. Like Antwerp, Ghent also has a pronounced industrial function.

The common characteristic of the ports of Zeebrugge and Ostend is their location at the Belgian coast. The port of Ostend is the smaller of the two and focuses chiefly on roll-on roll-off transport to and from Great Britain. Zeebrugge focuses primarily on roll-on roll-off (deep-sea and short-sea) and container traffic. In terms of both roll-on roll-off traffic and new passenger cars, Zeebrugge occupies the first place in the Le Havre-Hamburg range as well as in the range of directly competing coastal ports. The major destinations for the ro/ro traffic are Great Britain and, increasingly, Scandinavia and the Iberian Peninsula. The traffic of passenger cars, with origins/destinations all over the world, has grown fast. Container traffic is developing very quickly as well. Finally, the important role of the port of Zeebrugge in the handling of fuel gases should also be mentioned. The port’s capacity is flexible enough to handle this whilst taking into account the needs of new clients for its further development. The accessibility of the port is good due to its location on the coast, and moreover its draught capacity was optimised from 51 to 55 feet, which guarantees accessibility for container ships of the present and future generations.

Tables 2-67 and 2-68 show the traffic evolution for the four Belgian seaports, both in tonnes (Table 2-67) and TEU (Table 2-68).

Table 2-74: Total traffic in the four Belgian seaports, 1.000 tonnes, 1980-2004.

	Antwerp	Ghent	Zeebrugge	Ostend	Total
1980	81.935	18.424	14.189	3.760	118.308
1981	79.760	19.318	12.841	3.834	115.753
1982	84.203	22.894	9.339	4.168	120.604
1983	80.322	23.980	10.305	4.120	118.726
1984	90.338	26.592	12.001	4.629	133.561
1985	86.246	26.673	14.166	4.513	131.598
1986	90.204	24.159	15.124	4.036	133.523
1987	91.101	24.255	17.613	4.040	137.008
1988	96.909	24.158	20.050	4.826	145.943
1989	95.400	23.047	25.807	4.661	148.915
1990	102.009	24.439	30.349	4.552	161.349
1991	101.346	25.455	30.853	4.506	162.160
1992	103.628	22.818	33.441	4.923	164.810
1993	101.856	22.034	31.437	5.090	160.417
1994	109.494	23.833	32.886	4.900	171.114
1995	108.073	21.582	30.573	4.593	164.821
1996	106.526	21.008	28.499	4.466	160.499
1997	111.895	22.976	32.408	4.277	171.556
1998	119.789	23.632	33.284	3.938	180.643
1999	115.654	23.905	35.441	3.108	178.109
2000	130.531	24.039	35.475	4.307	194.352
2001	130.050	23.456	32.080	4.827	190.413
2002	131.628	23.980	32.935	6.238	194.781
2003	142.874	23.538	30.570	7.219	204.201
2004	152.326	24.956	31.794	7.545	216.621

Source: Vlaamse Havencommissie (Flemish Port Commission)

Table 2-75: Container traffic in the four Belgian seaports, TEU, 1980-2004.

	Antwerp	Ghent	Zeebrugge	Ostend	Total
1980	724.247	9.950	181.010	0	915.207
1981	794.611	16.817	222.199	0	1.033.627
1982	846.029	8.229	177.195	0	1.031.453
1983	1.025.517	9.023	205.017	0	1.239.557
1984	1.247.533	7.637	201.368	0	1.456.538
1985	1.243.009	9.592	218.258	0	1.470.859
1986	1.313.155	9.860	211.488	0	1.534.503
1987	1.437.193	8.642	209.140	0	1.654.975
1988	1.469.949	8.827	239.227	0	1.718.003
1989	1.473.746	10.453	288.187	0	1.772.386
1990	1.549.113	9.620	334.382	0	1.893.115
1991	1.761.422	9.251	303.954	0	2.074.627
1992	1.835.595	9.389	525.506	0	2.370.490
1993	1.876.304	10.272	490.027	0	2.376.603
1994	2.208.173	9.557	609.308	0	2.827.038
1995	2.329.135	5.778	528.470	0	2.863.383
1996	2.653.909	4.392	549.422	0	3.207.723
1997	2.969.189	10.613	648.153	0	3.627.955
1998	3.265.750	10.782	776.357	0	4.052.889
1999	3.614.246	11.010	850.164	0	4.475.420
2000	4.082.334	9.900	965.345	0	5.057.579
2001	4.218.176	15.590	875.926	4.675	5.114.367
2002	4.777.151	21.316	958.942	9.156	5.766.565
2003	5.445.438	28.688	1.012.672	13.266	6.500.064
2004	6.063.747	32.441	1.196.755	15.418	7.308.361

Source: Vlaamse Havencommissie (Flemish Port Commission)

2.12.1.2 General port sector organisation

Commercial ports in Belgium are of two kinds:

- Municipal ports that are run by an Autonomous Port Authority (Antwerp, Ostend, Ghent);
- The port of Zeebrugge, managed by a limited company, established by agreement between the Flemish Community, the City of Bruges and private port developers, under the supervision of the Minister of public works. According to the Port Decree, the Flemish Community is (from 17 May 2001) no longer a shareholder of the port of Zeebrugge.

Basically, Port Administrations in Belgium act as “Landlord Port Authorities”. They are responsible for developing basic land and port infrastructure and leave the cargo handling responsibility to private operators.

All the ports have a relationship with the “Vlaamse Havencommissie” (Flemish Port Commission) which is an advisory body under the supervision of the Flemish Minister for Public Works.

With regard to the financing of investments, the situation can vary between the various types of ports. Generally speaking, the basic criteria in the 4 Flemish ports can be summarised as follows:

- The public sector (Federal State, Flemish Region) has full responsibility for the construction of maritime access channels, light buoys, docks and navigational aids outside port, sea locks and exterior breakwaters, as well as road and rail infrastructure accessing the ports.
- Investments in terminal related infrastructure (docks, quays, reclaimed land, etc.) are financed partly by the State and partly by the port authority. As a general rule: 20% State and 80% port authority;
- The port authorities themselves (Article 9 of the Port Decree) carry out the exploitation and maintenance of the sea locks in the respective port areas. In fact, they were responsible for these activities even before the Port Decree was adopted. However, the Flemish Region grants these activities.
- Suprastructures (from surface finishing and paving to cranes and mobile equipment) fall into the responsibility of private operators.

In 1999, a new decree was issued, that will afford each port the same legal position. One of the most important elements of this decree is the fact that all port authorities will be incorporated. Antwerp, Ghent and Ostend are autonomous municipal port authorities. The port of Zeebrugge possessed corporate identity even before.

The new decree also determines very clearly responsibilities. Regarding financing practices, the decree states that the Flemish region has full responsibility for the construction of maritime access channels, the investments in port infrastructure, and the maintenance of the basic port infrastructure of the seaports. On the other hand, the port authorities will get a bigger responsibility for the investments in commercial infrastructure, as stated earlier in this study.

Since the Port Decree⁵¹ of 2 March 1999 “on the policy and management of seaports” (hereinafter referred to as the “Port Decree”), the Flemish Region uses new rules, on the basis of which the Flemish Region can intervene in the investments in port access routes (mainly dredging works, sea locks, access roads,...) and the terminal-related infrastructure (Docks, quay walls, land reclamation, etc.). These Flemish rules apply to the four Belgian (all Flemish) seaports: Antwerp, Zeebrugge, Ghent and Ostend.

In drawing up the regulations, the Flemish Region was mindful that these correspond with EC legislation and the practice of the Commission in the field of state-aid for ports, or at least that, where necessary, correspondence is ensured with the EC rules on state-aid in general. The rules of the Flemish Port Decree on funding, as contained in particular in chapter IV of the Decree, were aimed at corresponding with European developments in port funding and state-aid, as already revealed in the Green Paper on Sea Ports and Maritime Infrastructure. It is characteristic that the Port Decree aimed to concentrate government intervention on ensuring access for users in general in a non-discriminatory way, and ensuring that the port

⁵¹ The port policy is a regional matter. This means that the legal framework for the ports is Flemish. A Flemish law is called a decree.

authorities are responsible for the commercial infrastructure. This means that the port authorities are made more accountable with regard to the design of new commercially exploited projects, such as docks and quays.

The European Commission has decided on 20 October 2004 to authorise the financing package that allows the Flemish Region to allocate up to € 342 million to maritime ports in Flanders for port infrastructure investments, including dredging, for the period 2001-2004.

In the press release of 20 October 2004, the European Commission summarises the Flemish system as follows⁵²:

One part of the public contributions will be used for necessary construction and maintenance works (mainly dredging) in the maritime access routes leading up to the ports of Antwerp, Bruges-Zeebrugge and Ostend, as well as sea-locks and internal access routes (channel docks and turning basins) inside these ports. Another part will be made available for construction and maintenance of terminal-related infrastructure, such as the docks, quay walls, jetties, landing bridges, roll on/roll off-ramps and well as landside port access such as railway lines, service lines of local importance and internal access roads.

After examining the financing measures in light of the Community rules on State aid, the Commission has concluded that the public financing made available for the maritime access routes and sea-locks does not constitute State aid. The Commission considers that the activity of ensuring adequate access to and inside the ports does not constitute an economic activity liable to distort competition between Member States but is rather a public task in the general interest benefiting the Union as a whole. Therefore, this financing does not fall within the ambit of the State aid rules.

With regard to financing for the port infrastructure the Commission cannot exclude the existence of State aid, as the public funds made available by the Flemish region may serve to support an economic activity carried out by the Port Authority in question and hence may provide it with an economic advantage as compared to its competitors. However, the development of maritime ports, which are not only a key component for a sustainable and intermodal transport system but are also considered as centres of regional economic and social development, fits squarely with the EU transport and territorial policies. The measure also complies with the criteria established by the Commission's legal practice with regard to infrastructure financing. Accordingly, the Commission has concluded that the financing in question does not distort competition to an extent contrary to the common interest.

2.12.2 Work package I: Public financing of seaports

2.12.2.1 Task I-a: Identification of systems for public financing in Belgium

2.12.2.1.1 General legal framework

Articles 29-35 and Article 44 of the Port Decree, as well as a number of decisions for their execution, provide the legal basis for funding possibilities.

These provisions can be summarised as follows:

⁵² European Commission, Press Release of 20 October 2004, "The Commission approves public financing to maritime ports in Belgium".

- Article 29 lays down the responsibility of the Flemish Region for the construction, upkeep, maintenance and exploitation of the **maritime access routes and basic infrastructure**, with the exception of the basic infrastructure inside the port.
- For a transitional stage up to 2004, Article 44, § 2 of the Port Decree provided for a grant for the Port of Antwerp for the canal docks and turning basins (these are part of the maritime access routes). This transitional regulation was confirmed by a decision of the Government of Flanders of 13 December 2002 by an agreement with the Municipal Port Authority of Antwerp, subject to the approval of the EC Commission, if this were to be necessary.
- In addition, in execution of Article 31 of the Port Decree, the Government of Flanders took another decision on its execution on 13 July 2001, related to the co-funding of the upkeep, including the processing of dredging and the maintenance of the part of the maritime access route where there are **mooring installations** for seagoing vessels and vessels for inland navigation, with a view to the transshipment of goods or the transportation of persons⁵³.

Therefore the previous two points mean that:

- the Flemish Region funds the construction, upkeep and maintenance of maritime access and basic infrastructure (channels, turning basins) or grants the maintenance (Arts. 29 and 44);
- as regards the maintenance of the mooring places (ensuring their depth), this is the task of the Port Authorities, although they are able to obtain a contribution for this from the Flemish Region under certain conditions (Art. 31 of the Port Decree);
- As regards the inlet-docks, this is the task of the Port Authorities (after a short transitional regulation for tidal inlet-docks), for which the Port Decree does not provide any funding or grants from the Flemish Region.

In this respect it is important to note that, inspired by the European Green Paper on Seaports and Maritime Infrastructure, the Flemish Port Decree introduced a basic distinction between channel docks and inlet-docks. Channel docks are docks in the port for which the shipping channel serves as a maritime shipping route. They are viewed as part of the maritime access route to the actual port (also see Article 2, 17° of the Port Decree). The maintenance of the shipping channel (excluding any mooring places) of these channel docks is quite logically funded in the same way as the other parts of the maritime access route (such as rivers and shipping channels in the sea). Channel docks always give access to another channel or inlet-docks. An inlet-dock, is a dock, which has a dead end, and therefore serves as the final destination for the maritime vessels, which call at the port inlet-dock, where the commercial port exploitation takes place.

The Antwerp Port Authority only receives a grant for the maintenance dredging work in the actual channel docks, provided the port authority takes responsibility for the maintenance and upkeep of these channel docks. In the other port areas (Ghent, Zeebrugge and Ostend)

⁵³ Decision of the Government of Flanders on the co-funding of the maintenance, including the processing of dredging and the maintenance of the part of the maritime access where there are mooring installations for seagoing vessels and vessels for inland navigation, with a view to the transshipment of goods or the transportation of persons 13 July 2001, Off. Gaz. 9 October 2001.

the Flemish Region commissions these dredging activities to private dredging companies. The Region no longer contributes to the maintenance of the inlet-docks (following a temporary transitional arrangement in the outer harbours on the coast). This falls under the complete responsibility of the port authorities. In this way, from now on, in all Flemish ports a uniform objective financing regime will be applied.

- The maintenance, upkeep and exploitation of the **sea locks** situated in the port areas are the task of the Port Authorities. Article 29 *bis* of the Port Decree provides for the possibility of funding these works by the Flemish Region.
- Article 44, §1 of the Port Decree provided for a grant for a transitional stage up to 2003. This transitional rule was confirmed by a decision of the Government of Flanders of 13 December 2002, in an agreement with three Port Authorities.
- On 13 July 2001, the Government of Flanders took a decision on the execution of Article 30 of the Port Decree regarding the conditions and procedures for allocating, amending and withdrawing **project-related subsidies** and co-funding to the port authorities, and regarding the subsidy and co-funding percentages⁵⁴. It may be possible to subsidise basic infrastructure in the ports (docks and raising sites) and equipment infrastructure on the basis of this decision.
- Finally, a decision was also taken on 13 July 2001 on allocating subsidies to the port authorities for the **harbour captains' services** which can be explicitly allocated for traffic regulation, safety and safeguarding the environment.⁵⁵
- As regards this funding of the harbour captains' services in the four Flemish ports, the Commission already decided on 16 October 2002, following notification of the rules concerned, that there was no question of any state-aid⁵⁶.

Consequently the above reveals that, on the one hand, the Flemish Region is responsible for ensuring the maritime access to the seaports (inclusive the sea-locks) and the construction and maintenance of the basic infrastructure. On the other hand, it shows that the Flemish Region can also intervene (by means of co-funding arrangements or granting subsidies) with regard to certain tasks and infrastructure of general interest for which the port authorities are responsible. In this way the Flemish Region aims to implement the principle of subsidiarity, leaving scope for the local dynamic character of each port. At the same time, there is a strong increase in the port authorities' own contribution and responsibility: in the light of the significant financial resources, which the port authorities have to invest themselves, they will give priority to infrastructural works, which permit them to recoup these investments.

⁵⁴ Decision of the Government of Flanders regarding the conditions for the procedures for allocating, amending and withdrawing project-related subsidies and co-funding to the port authorities, and regarding the subsidy and co-funding percentages, of 13 July 2001, Belgian Off. Gaz., 30 August 2001.

⁵⁵ Decision on the provisions with regard to allocation subsidies to the port authorities for the harbour captains' services which can be explicitly allocated to traffic regulation, safety and safeguarding the environment, dated 13 July 2001, Belgian Off. Gaz., October 2001.

⁵⁶ Decision of the European Commission of 16 October 2002, case [N 438/2002 – Belgium](#).

2.12.2.1.2 Specific information

2.12.2.1.2.1 Access infrastructures

2.12.2.1.2.1.1 Maritime access routes

The term ‘maritime access route’ is defined in Article 2, paragraph 16 of the Port Decree as: “the shipping channels in the North Sea, West Scheldt and Lower Sea Scheldt, other rivers and channels designated for maritime shipping; the shipping channels in the tidal parts of the ports, including the access channels to the sea locks, in each case with their related installations; the channel docks and inlet-docks; the channels”.

According to Article 29 of the Port Decree (chapter IV, funding), the Flemish Region is responsible for the construction, upkeep, maintenance and exploitation of these maritime access routes (including the channel docks, see above). In some ports or parts of ports (in particular, Zeebrugge, Ghent, Ostend and Antwerp Left Scheldt Bank - Waaslandhaven) the Flemish Region is also responsible for the execution of this dredging work itself. The Flemish Region does not carry out this work under its own management, but contracts it out to private third party dredging companies in accordance with the rules on government contracts. In the Port of Antwerp (Right Bank), the maintenance dredging work in maritime access routes (channel docks and inlet-docks) in the port area has traditionally been carried out by the port authority itself under its own management and with its own dredging fleet. As indicated below, the funding of this dredging work by the Region is limited and subject to conditions.

2.12.2.1.2.1.2 Sea locks

The port authorities themselves (Article 9 of the Port Decree) carry out the exploitation and maintenance of the sea locks in the respective port areas. In fact, they were responsible for these activities even before the Port Decree was adopted. However, the Flemish Region grants these activities.

This concerns the funding of a public task, which cannot be characterised as a state-aid either, because of the above-mentioned reason given in the various Notices of the Commission. It should be noted that it is common practice in the neighbouring countries. For example, the complete operation and maintenance of the sea and inland navigation locks in harbours of the neighbouring countries are carried out and / or wholly funded by the central government.

In addition, the Flemish Region ensures that the subsidies for port authorities, as a payment for the exploitation and maintenance of the sea locks (mainly personnel costs) are not under any circumstances higher than the amount of the normal costs for performing these tasks, on the basis that they must be carried out efficiently. For this purpose, the Flemish Region has consulted an independent research agency which carried out a detailed audit.

From 2004, the grant will take place on the basis of Art. 29bis of the Port Decree, but on the same basis as for the period 2001-2003. The examination, which was carried out by an independent office of accountants (PwC), and will be carried out regularly in the same way

after 2003, guarantees the reliability of the granted tasks, which are also actually services of general interest⁵⁷.

Therefore this grant subsidy is not a state-aid in the sense of Art. 87 of the EC Treaty.

2.12.2.1.2.2 Terminal related infrastructure

Following Article 30 of the Port Decree, and its implementing decision, the Government of Flanders is authorised to grant subsidies to the port authorities for investments in the basic infrastructure in the ports and the equipment infrastructure (including the replacement of technically and economically outdated constructions) or to co-fund these investments.

Similarly, Article 31 of the Port Decree and the implementation decision authorises the Government of Flanders to co-fund the upkeep, including the processing of dredging, and the maintenance of the part of the maritime access routes taken up by transshipment facilities or facilities for the transport of persons.

‘Co-funding’ takes place when the infrastructure concerned is the property of the Flemish Region, and serves another public purpose for the Flemish Region, in addition to the commercial function for the port authority (for example, in addition to the commercial transshipment function of a quay wall, the water defence function of that quay), which means that the Flemish Region wishes to observe its responsibilities with regard to safety as the manager of the waterways. There is a ‘subsidy’ when the infrastructure concerned is the port authority’s property. However, The financial contribution, which the Flemish Region can make in this way, is limited.

In the first place, the sum of the subsidies or co-funding is strictly related to the cost price of the infrastructural investment concerned⁵⁸. The port authorities or, where appropriate, the Flemish Region, which act as the construction manager for the investment concerned⁵⁹, are obliged to approach the market, in pursuance of the rules on government contracts. Basically, the amount that is eligible for subsidies or co-funding consists of the amount allocated to the contract⁶⁰. When a port authority carries out works under its own management, with its own personnel⁶¹, a sum will be determined, based on the realistic market price, or where appropriate, on the advice of an independent expert.

⁵⁷ With regard to this aspect and the role of the accountants also see: European Commission, 12 November 2002, “Non Paper: Services of general economic interest and state subsidy”, § 91.

⁵⁸ See Article 5 §2 of the Subsidy and co-funding decision and Article 4 §2 of the Co-funding decision on transshipment facilities or facilities for the transport of persons in maritime access.

⁵⁹ For investments in the basic infrastructure in the port and in the equipment infrastructure, the port authorities always act as construction manager (see Article 7 §5 of the Subsidy and co-funding decision). In the case of works related to the upkeep and maintenance of the part of the maritime access routes along which there are mooring installations, the works are carried out by the port authorities or are commissioned by the Flemish Region, Article 4 §3 of the Co-funding decision on this matter.

⁶⁰ See Article 5 §2 sub 1° of the Subsidy and co-funding decision and Article 4 §2 sub 1° of the Co-funding decision on transshipment facilities or facilities for the transport of persons in maritime access.

⁶¹ This only concerns works related to the upkeep and maintenance of the part of the maritime access routes along which there are mooring installations.

A percentage is applied to calculate the maximum permitted subsidy or co-funding for the amounts, which are eligible for subsidies, or co-funding⁶². For basic infrastructure in the port, the subsidy and/or co-funding percentage amounts to a maximum of 50% (Art. 30) of the sum eligible for subsidy and/or co-funding⁶³. For equipment infrastructure this percentage is a maximum of 30%, and from 1 January 2004, it will even be reduced to 20%⁶⁴. For the part of the maritime access routes that is taken up by transshipment facilities or facilities for the transport of persons, the co-funding percentage also amounts to a maximum of 20% (Art. 31)⁶⁵.

The Government of Flanders considers that the regulation described above, as laid down in Articles 30 and 31 of the Port Decree and the two decisions for its execution, do not fall under the scope of operation of Article 87, paragraph 1 of the EC Treaty. After all, no advantages are granted to certain users or companies. As the Commission indicated in its recent Communication to the European Parliament and the Council on reinforcing quality services in port areas, it is always necessary to take into account the criterion for selection as a benchmark, to decide whether a state subsidy applies or not.

In the first place, it is necessary to determine that investments, e.g., in internal access routes in the port area, as well as service lines and railway lines to the docks, terminals, etc., constitute general measures which fall under the broader government policy related to the development of the general transport infrastructure, including the development of the ports. The same applies, for example, for the construction of docks and quay walls, which are generally also large investment projects requiring extremely large initial capital investments, which can only be recouped from income (such as harbour dues) in the long term. Despite the public character of these investments, the financial contribution of the Flemish Region is always limited (50%, 30%, and 20%). After all, the basic philosophy of the Port Decree is to bring about a significant economic and financial accountability on the part of the port authority. The limited intervention of the Flemish Region guarantees that priority is given to infrastructural works with the highest economic effectiveness and return. As a result, the risk of 'over-investment', even in public infrastructure, is limited in a "self-regulatory" way.

The way in which users are admitted to this infrastructure in principle also reveals that it is public infrastructure, which is open to all present or future users, as well as to prospective infrastructural managers, who will all be obliged to make a payment for its use. In this context it can be pointed out that the docks and mooring infrastructure (in particular, quay walls, jetties, etc.), invested in by the Flemish port authorities are in principle based on the "multi-user" concept. Either the docks and quay walls, (possibly with the terminal) are open to all shipping companies whose ships dock in the port, and the shipping company itself is responsible for dealing with the goods or makes use of an operator of his choice, or a single terminal operator, who in principle serves all the shipping companies which dock in the port, has the exclusive use of the docks and quay walls (along which a terminal is installed). Currently there is a trend in the European ports for port managers to provide so-called

⁶² These should be reduced by certain limits (see Article 5 §3 of the Subsidy and co-funding decision and Articles 4 §2 sub 3° and 4 §3 of the Co-funding decision on transshipment facilities or facilities for the transport of persons on maritime access routes.

⁶³ See Article 5 § 4 of the Subsidy and co-funding decision.

⁶⁴ See Article 5 § 5 of the Subsidy and co-funding decision.

⁶⁵ See Article 4 § 4 of the Co-funding decision on the transshipment facilities or the transport of persons on maritime access routes.

“dedicated” or “semi-dedicated” terminals as well. This is the situation in which the port authorities reserve the use of a dock and/or quay wall for a particular (shorter or longer) period for a particular shipping company or a particular cooperative venture of shipping companies. A terminal is established in this infrastructure, which can be exploited by the shipping company itself, a specialised operator, or a co-operative venture. Other arrangements or combinations of the above are also possible.

When a port authority submits an application for a subsidy or the co-funding of infrastructure (e.g., a dock or quay wall) for which the port authority wishes to grant a concession to a terminal operator or a particular user, the Flemish Region will make the application dependent on the condition that this terminal operator or user is selected on the basis of a public, transparent and non-discriminatory selection procedure.

Furthermore, the regional port commissioner (appointed in pursuance of Article 23 § 1 of the Port Decree and responsible for the control of the four Flemish port authorities, for example, attending the meetings of the boards of directors of the port authorities) will ensure that the decisions of the port authorities are in accordance with the Port Decree and the decisions for its execution, and with the legal provisions on the funding of port investments and the agreements between the Region and the port authorities.

The above implies that, for example, a new quay wall or any loading or unloading equipment for loading and unloading raw materials, e.g., for a steel company x or a chemical company y, or any other company located by a channel dock or inlet-dock, which is wholly or mainly used for supplying their own raw materials or transporting their own products, are in no way funded by the Flemish Region. The autonomous port authorities cannot receive any subsidy or contribution for this, because the construction of this infrastructure does not comply with the “multi-user” principle.

The Flemish Region considers that in the above circumstances, the subsidy and/or co-funding of this infrastructure does not give an advantage to particular companies, and consequently does not contain any elements of a *state-aid*.

If it is considered to subsidise or contribute to this sort of infrastructure after all, the Flemish Region considers that Article 7 of the decision of 13 July 2001 (Belgian Off. Gaz., 30 August 2001) enters into effect, and an ad hoc notification must be made. This ad hoc notification is then made because, in deviation from the current notification proposed (for “multi-user” terminals), this transshipment infrastructure would then be intended for one particular local user and for its own operations.

In this way this funding arrangement contains an ex ante control to guarantee that the Flemish Region does not grant a *state-aid* when it awards subsidies or co-funding. In fact, on the basis of the applicable rules, the Flemish Region is obliged to examine in every application for a subsidy or co-funding, whether (part of) the subsidy or co-funding could possibly, in the light of the policy of the Commission, contain elements of *state-aid* in the sense of Article 87, paragraph 1 of the EC Treaty, such as, for example, the case described above of a mooring place which does not have a multi-user function, but could be used by a company for its own use. If, in the case of a specific project it becomes clear that the proposal to grant a subsidy or co-funding could be considered a *state-aid* in the sense of Article 87, paragraph 1 of the EC Treaty – despite the framework of regulations outlined

above and the guarantees these contain – the Flemish Region must notify the Commission of the proposal in accordance with Article 88 of the EC Treaty⁶⁶. In this case, the application for a subsidy or co-funding is suspended, pending a decision from the Commission. The Flemish Region can then make the granting of a subsidy or co-funding dependent on the port authority's compliance with certain conditions which might be necessary, for example, to obtain the approval of the European Commission⁶⁷. If the Commission considers that the proposal to grant a subsidy or co-funding is not in accordance with the common market, the Flemish Region will reject the application⁶⁸.

2.12.2.1.2.3 Suprastructures

The Port Decree reveals that the Flemish Region does not intervene in the funding of the suprastructure (roads on the terminal, surface finishing, terminal paving, port/office buildings, warehouses, cranes, mobile equipment,...). Therefore the users of the port must fund the suprastructure themselves. In fact, Article 35 of the Port Decree provides that the burden of investment in suprastructures should never be at the expense of the Flemish Region. Suprastructures are defined as *'Navigation storage areas and lifting equipment of any nature, and all the structures in the port which do not fall under maritime access routes, basic and equipment infrastructure, or basic infrastructure in the port.'*

This policy decision of the Flemish Region also corresponds with the philosophy of the European Commission in this respect, e.g., as revealed by the Commission Communication to the European Parliament and the Council with regard to reinforcing quality service in port areas, dated 13 February 2001.

For rail infrastructure on the terminal, the situation is more complex as rails on the terminal are either financed (and owned) by the terminal operator, or financed (and owned) by the Belgian rail infrastructure manager (Infrabel). In general, for the port area, rails on the terminals are financed and owned by Infrabel. Infrabel is a newly created company, set up on 1/1/2005 (following the split of rail infrastructure and rail exploitation of the former national monopoly NMBS/SNCB, in order to comply with EC regulation). Infrabel has been given a natural monopoly for the rail infrastructure management. Its income for 2005 consists of approximately 70% Belgian federal state funding and 30% from user payments (which primarily come from the state owned passenger and cargo companies, NMBS/SNCB passenger transport and B-Cargo). Although there are no formal laws or contracts describing the relationship between the seaports and Infrabel, we were able to obtain recent formal communication between Infrabel and the ports with regard to the building and maintenance of new rail infrastructure on the maritime terminals in the seaports. These guidelines will apply from January 1st, 2005 on. For existing infrastructure, this system will be gradually introduced, as it reaches its end-of-life. The concession holder can choose between renewal or elimination of the infrastructure.

This formal communication starts from the principle that there needs to be more accountability from the concession holder with regard to maritime rail infrastructure on his

⁶⁶ See Article 7 of the Subsidy and co-funding decision and Article 6 of the Subsidy and co-funding decision on the transshipment facilities or transport of persons on maritime access routes.

⁶⁷ See Article 34 of the Port Decree, Article 7 §3 of the Subsidy and co-funding decision and Article 6 §3 of the Subsidy and co-funding decision on the transshipment facilities or the transport of persons on maritime access routes.

⁶⁸ See Article 6 §3 sub 2° of the Subsidy and co-funding decision and Article 5 §3 sub 2° of the Subsidy and co-funding decision on the transshipment facilities or the transport of persons on maritime access routes.

private territory (i.e. port concessions to terminal operators). In the past, the NMBS/SNCB (now Infrabel) always fully paid the initial investment and maintenance of the infrastructure, which caused a relative excess of rail infrastructure and land occupation without any accountability from the concession holder. In the new system, Infrabel will – after internal approval of the project – pay the initial investment, but ask for a yearly payment related to the amount of the investment. Every year, the concession holder can submit a file which states his rail volume, on the basis of which a rebate on the yearly payment can be obtained. If volumes are large enough, the payment can be entirely recuperated.

The conditions for the application for a new connexion are that the infrastructure is situated (1) in seaport territory (as described by Regional Plans), (2) on a concession with a deep water quay which is used for maritime cargo handling (sea-shore transshipment or vice-versa). For other investments (non-maritime concessions or industrial sites), rail connexions have to be integrally paid by the concession holder, as it is the case on the Belgian territory.

The yearly file for rebate consists of several official documents stating the total maritime volume (certified by the Port Authority), the total rail volume (certified by rail operators) as well as the number of handled rail wagons. On the basis of an “expected” rail market share, set by Infrabel, the rebate is calculated on the basis of the number of handled wagons, corrected by actual versus “expected” market share. The initial rebate per wagon (adjustable for the Consumer Price Index) is set at 1,29 euro per wagon (June 2004).

2.12.2.1.2.4 Operational management

The Flemish ports (Antwerp, Ghent, Zeebrugge and Ostend) are all public companies. Antwerp, Ghent and Ostend are autonomous municipal port authorities, though they are for accounting purposes and financially completely independent of the municipalities.

Each port has a chief executive officer who may be termed Director of the port. In the case of municipal ports, this officer is appointed by the City Council. In Zeebrugge the chief executive officer is appointed by the Board of Directors.

2.12.2.2 Task I-b: Public financing in the port of Antwerp in 2003

2.12.2.2.1 Introduction

The following leading principles were given priority in drawing up the Flemish Port Decree: a clear and transparent relationship between the sea ports and the Flemish Region, greater autonomy for the local port authorities with regard to management and exploitation, greater flexibility for these port authorities with regard to personnel policy, the obligation for all port authorities to acquire legal personality, uniform operational conditions for all sea ports, and, in a very prominent way, ensuring that the Flemish policy on port funding is objective, characterised by greater accountability on the part of the port authorities and a conscious correspondence with European policy. The rules in the Port Decree apply to the four Flemish ports and are completely as explained earlier in this study.

In the following paragraphs, we will apply this to the Port of Antwerp. First, the main characteristics of the port will be described, as well as the governance structure. Second,

more detailed information will be provided on the investment and maintenance responsibilities, as well as the financing structure, in addition to the information given in section 2.1.. Third, we will analyze some specific operating activities of the Port Authority (the renting of cranes and the tug service). Fourth, we will briefly describe the main principles and general lay-out of the Activity Based Costing system of the Port Authority. Fifth, the analysis will provide a case-study of an important port development project, the Deurganckdock. The financing structure will be given under “old” regulation (i.e. before the Port Decree), as well as a simulation under “new” regulation (i.e. applying the Port Decree). Also, a simulation will be made using actual port dues and tariffs to assess whether the investment and maintenance costs of the new facility will be covered. Finally, the results will be summarized in a conclusion and a perspective on future financing of port development in Belgium will be provided. Information on the charging practices of the Port, as well as details on its revenue structure, are found in section 3 of this report.

In this report, the resulting flows for 2003 are described. However, given the specific situation of the port due to the notification of a number of public funding amounts to the European Commission, the Flemish Government did actually not pay for the services the port performed on behalf of the Flemish Region. Therefore, figures of other years needed to be mentioned and extrapolated to the year 2003. Another methodological problem is the description of flows resulting from the building of new port capacity, for which public funding was granted. In most cases, these projects take several years before they are in use. In the years just before the actual activity starts and the building costs are the highest, public funding can seem extremely high in comparison with other ports (which don't have an important project to build). Therefore, we opt for a case-study approach, describing the project as a whole, in order to gain a global insight into the financing structure of relevant and representative port development projects. In the case of the port of Antwerp, we will analyze the case of the Deurganckdock project, a new tidal dock with container terminal handling facilities (capacity 6,3 to 6,4 million TEU). This project was approved by Government in 1998, and the first phase was opened on July 5th, 2005.

The information sources used for the analysis of the Port of Antwerp are:

- Interviews with port representatives: during the months of April and July, three meetings between the researchers and representatives of the Port Authority were held.
- Annual reports of the port;
- Internal documents of the port;
- Documents and information on the port website;
- Several reports of Flemish Government and Parliament;
- The notification files of the Flemish Government to the European Commission;
- Former studies and research;
- Articles from the specialized press, e.g. Lloyd's List.

2.12.2.2.2 Main characteristics and governance structure

2.12.2.2.2.1 Definition of the port area and infrastructures

The port area is defined by Regional Development Plans. For the port of Antwerp, the outer limits of the seaport area are still defined by the Regional Plan ("Gewestplan") of 1978. In order to define the port in more precise terms, official documents point at the federal government Royal Decree of 2/2/1993, which treated the transfer of the ports area and infrastructures to the Regions. The Regional Plan as a whole is now under revision as all Flemish seaports are undergoing a strategic planning exercise, in order to define the outer limits of port expansion with horizon 2030. The eventual result of the planning process, a "strategic environmental impact report", will eventually become law. This report is expected to be finished during the course of 2006.

The port of Antwerp is located along the river Scheldt, with port and industrial area along both banks of the river. On the Right Bank, the Port Authority fully owns and manages the docks as well as the sites used by port operators and industrial firms. On the Left Bank, the Port Authority manages the sites with maritime access along the river and the docks. However, land use and industrial policy are the responsibility of another public sector organization, i.e. the Company for the Management of Land and Industrialization of the Left Bank of the River Scheldt.

The total port area is 13.348 hectare, with the Left Bank area at 5.809 hectare, the Right Bank area at 7.539 hectare (Port of Antwerp, 2002). This area comprises docks, locks, quays, navigation channels, other infrastructure (roads, rails), maritime and industrial sites, sites in the process of being developed, expansion territory as well as nature compensation areas and buffers. Although the Right Bank has a larger surface area, the expansion possibilities for economic activities are almost all situated on the Left Bank. The Right Bank also contains a larger water surface area as well as rail and road infrastructure, due to the historical presence and development of the old docks as well as the train formation yard. The total length of the road network in the port is about 280 km, whereas the total length of the port's rail network is 960 km. A detailed and exhaustive list of the port's infrastructures, handling capacity and technical equipment on 1/6/2004 is provided in annex 3.11.6

2.12.2.2.2.2 Type of commodities and traffic evolution

In 2003, the port of Antwerp handled ca. 143 millions of metric tonnes, with a breakdown as follows (see Table 2-76):

Table 2-76: Traffic evolution and breakdown for the port of Antwerp (2003-2005)

(tonnes)	2004	2003	2002
Containers	68.280.028	61.350.335	53.016.582
Roll-on – Roll-off	3.826.811	6.045.405	5.836.800
Conventional general cargo	17.622.479	14.439.527	14.483.004
Liquid Bulk	35.280.379	35.127.429	31.994.649
Dry Bulk	27.316.868	25.911.816	26.297.781
Total	152.326.565	142.874.215	131.628.816

Source: own calculations, based on annual reports (2003, 2004) and the website.

2.12.2.2.3 Governance structure

The Antwerp Port Authority, 100% owned by the City of Antwerp, is an Autonomous Municipality Corporation with corporate identity, operating under public law, and performs the following activities:

- The ownership, management, planning, maintenance, expansion and modernisation of port infrastructure;
- The provision of services such as dredging, towage, the renting of shore and floating cranes, the renting of warehouses, as well as the distribution of electrical power⁶⁹.

The Port Authority acts as a landlord port, whereby private companies lease quays and sites from the Port Authority, and are responsible for all the necessary investments in superstructure (paving, buildings, cranes, etc.).

With regard to the financial reporting and accounting policy, the Port Authority is subject to the Belgian federal legislation regarding accounting and the annual account of private companies (legislation dated 17/7/1975 and Royal Decree of 30/1/2001). The drawing up of the annual account is the responsibility of the Board of Directors. The financial management is supervised by a college of three commissioners, appointed by the city council. For 2003, these commissioners were the auditing firm Deloitte & Touche, and two city councillors, who act as independent auditors.

The governing bodies of the Antwerp Port Authority are:

- The board of directors, chaired by the alderman for the port and consisting of council members representing the political parties, several experts on labour and economic relations in the port, nature conservation, the private sector in the port, etc..;
- The regional port commissioner, appointed by the Flemish Government, watching over the compliance of the decisions of the board of directors with the Port Decree as well as general objectives of Flemish port policy. The regional port commissioner attends the meetings of the board of directors;
- The management committee, consisting of the general manager, the chief engineer, infrastructure manager, the harbourmaster and the chief financial officer.

⁶⁹ The task of the supply of electricity results from the deregulation of the electricity market. The Port Authority has been appointed by the VREG (the Flemish body responsible for the regulation of electricity and gas) as network operator since September 5th, 2003 for a period of 12 years. With regard to the financial aspect, the Port Authority has to put forward tariff proposals in line with the guidelines laid down by the CREG (Commission for Regulation of Electricity and Gas).

2.12.2.2.3 Investment and maintenance responsibilities, financing structure

2.12.2.2.3.1 Flows from the Flemish Region to the port

In this section, the general and specific information on the legal framework will be applied to the Port of Antwerp. Therefore, we need to consider four possible public funding types as identified in task 1a:

- Funding for the dredging of channel docks, which make part of the maritime access;
- Funding for the maintenance and exploitation of the sea locks;
- Funding for the harbour master's services;
- Funding under the form of project related subsidies (quays, docks).

In the case of **dredging, maintenance and exploitation of the sea locks and the harbour master's services**, it concerns services which are granted to the Antwerp Port Authority by the Port Decree (and which were formerly also provided and executed by the Antwerp Port Authority, but without a clear legal framework; the Port Decree brought clarification). The Port Decree and its accompanied measures were notified to the European Commission and approved (see section 1). The subsidy mechanism works as follows for these services. First, the Flemish Region makes a detailed estimate of the future cost (on a yearly or three-year basis), based on historical data. This estimate is communicated to the port authorities, and is considered as the maximum subsidy. Each quarter of a budgetary or financial year, the port authority receives 20% of this maximum subsidy. At the end of the budgetary year, the port authority needs to provide the Flemish Region with a file, describing the real costs which occurred. If the real cost exceeds 100% of the maximum subsidy, the port authority needs to finance the excess costs with its own financial means. If the real cost is below 100% of the maximum subsidy, the relevant percentage of the maximum subsidy is paid. The file representing the real costs is based on the Activity Based Costing system of the Port of Antwerp (see *infra* for a detailed description of the system), and reviewed by the Flemish Region, assisted by a chartered accountant to verify the true nature of the costs. After amendments from the Flemish Region, the subsidy is granted and paid. For the year 2003, Table 2-77 shows the received subsidies for each service activity mentioned above, as well as the real costs incurred according to the ABC system of the port authority. Here, it must be mentioned that during 2001-2004, no public financing for dredging and maintenance and exploitation of the locks was actually paid to the Flemish Port Authorities, as the notification file was being treated by the European Commission. After the approval of the European Commission during the course of 2004, the amount for 2001-2004 was received in February 2005 and consisted of 72 million euro of which 47,3 million euro had to be allocated to years prior to 2004. As a result, the numbers for 2003 are based on an extrapolation.

Table 2-77: Real costs versus received subsidy (2003 and 2004)

Service	Subsidy from government (euro)	Real costs (ABC) for the port (euro)	Cost coverage (%)
Harbour master services			
2003	5.458.018,50	8.464.146,94	64,5%
2004	7.377.500,00	9.140.736,26	80,7%
Dredging of maritime access			
2003	15.170.062,00	16.286.185,62	93,1%
2004	20.226.749,00	21.375.079,19	94,6%
Dredging of commercial mooring facilities			
2003	402.664,00	3.036.183,47	13,3%
2004	536.885,00	729.572,49	73,6%
Exploitation of sea locks			
2003	8.068.220,00	12.842.733,17	62,8%
2004	10.757.628,00	14.928.935,62	72,1%
Average	8.499.716	10.850.446	78,3%

Source: Port of Antwerp (2005) and own calculations

The table shows that the subsidies received for the services performed on behalf of the Flemish Region do not cover the actual full cost of the port authority. Whereas the subsidy should cover 100% of the costs (as should be the case according to the decree), only an average of 78% is covered. The main reason for the difference is that the Flemish Region (1) does not take into account indirect costs of the port authority (e.g. costs for HR and financial services) resulting from the performance of these granted activities and (2) the maximum subsidy is a very “optimistic” calculation from the part of the Flemish Region, and also based on prices of 1998, without any correction for inflation. As a result, some 20% needs to be recouped from the turnover of the port authority (port or concession dues).

In the case of funding under the form of **project related subsidies**, the analysis of the Port Decree (see task 1a) shows that the Flemish Region has, from January 1st, 2004, (1) largely withdrawn from subsidising **project related infrastructure** (docks and quays) (2) made an approval on co-financing new port development projects (docks and quays) subject to strict conditions such as the “multi-user” principle, as well as the selection of the terminal operator(s) on the basis of a public, transparent and non-discriminatory procedure. Formerly approved projects, such as the Deurganckdock (approved by Flemish Government in 1998), still fall under the old regime of public financing whereby the Flemish Region approved higher percentages of co-finance for project related infrastructures. An in-depth analysis of the financing structure of the Deurganckdock can be found in section 3.12.2.2.6., where the amounts of public funding for the building of this specific project will be given.

2.12.2.2.3.2 Flows from the port to the public sector

The Port Authority became an independent company in 1997. Before, the Port Authority formed an integral part of the municipal administration. However, the governmental decision regarding the transition to an autonomous corporation stipulated that the City of Antwerp should not suffer any disadvantage. As a result, besides taking over personnel liabilities, it was decided that the Port Authority should also pay a fixed annual amount to the City of Antwerp. Under the present agreement, this dividend payment is set at 2.069.910 euros per year.

Furthermore, the Port Authority has to reserve financing for city renovation projects in the old parts of the harbour (the “Eilandje”), for the period 2001-2006. This activity does not contribute to the port activity itself as it concerns the renovation of bridges and other public spaces in an area which is now mainly destined for housing and leisure, and from which the port activity has since long withdrawn.

A more important financial obligation vis-à-vis government is the build-up of a pension fund. The port not only pays out current pensions but also needs to carry the “historical” pension payments that used to be on the account of the City. The City never did constitute any reserve for the payment of the pensions of the port’s employees. Therefore, the Port Authority needs to build up its own pension reserve, while assuring the payment of current obligations. In practical terms, this means that at the end of each financial year (FY), any profit above 2.299.901 Euro (the dividend for the City plus the legally imposed reserve amount of 10%) is contributed to the pension fund for tenured personal, in order to be able to build up the legally required minimum pension reserve resulting from the take-over of the pension obligations from the City of Antwerp. This condition is part of the agreement between the Port Authority and the pension fund supervisory body, CDV (The Belgian regulatory body for insurance) and has been applied since FY2000. This agreement also explains why the profit for the FY2003 is the same as for FY2002.

On December 31st, 2004, the total reserves amounted to 117 million euros (94 millions at the end of FY2003), the minimum objective being 238 million euro (as calculated by the actuaries of the CDV). Therefore, considerable effort will be needed from the Port Authority in the coming years to attain the minimum required pension fund level.

As a conclusion, it can be argued that besides the annual dividend that is paid to the City, there exists an important “indirect” flow to the public purse, as the Port Authority needs to finance past pension obligations of the City from its operational activities (port dues, concessions, etc.). However, this also forces the Port Authority to pursue constant efficiency improvements, and leads to an important enhancement of financial accountability. On the other hand, this obligation places a burden on some infrastructure projects, as considerable resources have to be allocated to the creation of the pension reserve and cannot be allocated to port development projects and the maintenance of infrastructure.

With regard to taxes, the port needs to pay all taxes conventionally imposed on business (local taxes, environmental taxes, VAT, real estate tax), except the tax on profit.

2.12.2.2.3.3 General financing structure

With regard to the financing of the port’s activities and projects in general, three flows have to be considered, resulting from the analysis of sections 3.12.2.1 and 3.12.2.2, as well as the interviews with port representatives:

- Port dues, concession revenues as well as revenue for services performed, in order to finance port development projects, maintenance of infrastructure, the provision of services (crane hiring, tug services), potential shortages in public funding for granted activities (dredging of maritime access, sea locks exploitation, harbour master's services). An in-depth analysis of revenue sources, as well as the flows for 2003, are given in section 3.12.3;
- Bank loans, negotiated with commercial banks, in order to finance port development projects;
- Public funding for granted activities (e.g. dredging), as well as specific project related infrastructure (docks and quays).

With regard to loans, it has to be mentioned that all loans are negotiated with commercial banks, on the basis of tenders. The port authority does not receive any loans on privileged terms from government and/or other public agencies.

2.12.2.2.4 Description of specific operating activities

Apart from the management of the port infrastructure as a landlord, the electricity supply and the services granted by the Flemish Government (dredging of maritime access, maintenance and exploitation of the sea locks, harbour master's services), two particular activities deserve attention: the crane company of the port, and the tugging service.

2.12.2.2.4.1 The crane department

Whereas most landlord ports are withdrawing from port operations, the port of Antwerp still owns a crane company. The existence of the crane company is historical and goes back to medieval times when the city hired out a treadmill crane to users wishing to unload ships. The company flourished until after World War II, when private operators started to invest in their own cranes instead of renting. As a result, the company was in steady decline and the port authority even considered to abolish the company in the early 1990s as it was continuously loss-making and causing a real cash drain. The Port Authority decided to keep the service under two conditions. First, the company had to become financially self-supporting. Second, the company would not engage in unfair competition vis-à-vis private companies that own or rent out cranes.

The decision was followed by a more commercial strategy, stabilizing the use of the dock cranes and increasing the use of mobile cranes. At present, 25 shore cranes and 8 mobile cranes are available for renting from the crane department (on a total of more than 250 cranes and gantries in the port, see annex 3.12.6). The company also offers a complete service, as the cranes are rented out with crane drivers as well as technical support staff. The rationalization and more commercial approach has led to a profitable company since 2003 (turnover in excess of 4 million euros), with good prospects for the future (Annual report 2004, De Lloyd, 2005). The crane renting activity also forms an integral part of the Activity Based Costing system, and is considered as one of the end-products of the activities of the Port Authority. The separate treatment in the ABC system leads to a separate profit and loss account of the activity, in order to enhance transparency as well as financial accountability of the crane companies' management.

The tariff structure is based on shifts, which have to be ordered in advance. In general, the tariff for a shift depends on the type of equipment and the duration (number of shifts or parts of a shift).

2.12.2.2.4.2 The tugging department

The port of Antwerp operates its own tugging fleet inside the harbour (behind the locks), for which a monopoly is granted by the City. The monopoly inside the harbour is granted for reasons of security as in-depth knowledge of the port is needed. According to respondents, tugging in the maritime access (on the river Scheldt) and inside the port are also to be considered as two different types of activities (“industrial production versus hand-made tailored work”). On the river Scheldt, the tugging services are performed by URS (Unie van Redding en Sleepdiensten - Towage and Salvage Union), an internationally operating firm.

The tugging activity of the Port Authority is included in the ABC system, and is considered as one of the end-products of the activities of the Port Authority. The separate treatment in the ABC system leads to a separate profit and loss account of the tugging activity, in order to enhance transparency as well as financial accountability of the tugging department's management. As one of the end-products of the port, the tugging activity has to contribute in a positive way in financial terms, in order to cover the “real” overhead costs of the Port Authority (see *infra* for a description of the ABC system).

The tariff for tugging is based on the distance to be covered inside or between port areas, and the Gross Tonnage of the ship.

2.12.2.2.5 General principles and structure of the Activity Based Costing System

After the creation of the Autonomous Municipal Company in 1997, the management decided that it needed a better insight in the cost structure of the different products and services, and a better follow-up of the operational results of the different entities. Furthermore, the Port Authority operates in a context of constant organisational change, external influences, a complex internal organisation with a large number of internal client/supplier relations, lack of integration of information systems and an increasing volume and complexity of the demand for management information.

Therefore, the Port Authority decided to start the implementation of ‘Full costing’ system using the Activity Based Costing (ABC) method, in order to avoid arbitrary adjudication of indirect costs, as well as a growing overhead. As a result, the management of the Port Authority would get a better insight in the own operations. The ABC method also enhances transparency by limiting the overhead costs to an absolute minimum. As a result, the operational results of the different products and services can be closely followed up and brought to a level where all costs (direct as well as indirect costs) are covered. In other words, the financial result of the operational activities (products and services) serves to compensate the ‘real’ overhead costs (i.e. those costs which do not have a meaningful and causal link with an end product or service, e.g. the Strategy Department).

The advantages of the system are, according to the Port Authority:

- A more accurate definition of the margins;
- Better quality of simulations and sensitivity analysis for investment and projects;
- Faster and accurate identification of problems;
- Analysis of internal client/supplier relations;
- Internal benchmarking of tariffs;
- Insights in the resource consumption per activity;
- Better insights in the processes of the company.

In a next phase, profit and loss reports per product/service are created. Besides the introduction of a full costing approach, the result should be an increased performance of the company's products and services. With regard to specific implementation, as well as operational aspects of the system, the research team can, after approval of the Port Authority, supply the EC services with a short PowerPoint presentation. Members of the Port Authority are also prepared to invite the EC services to explain the operational details of the method⁷⁰.

Table 2-78 shows the different end products (or 'cost objects') which are currently included in the system, as well as their relative share of the costs resulting from the provision of these services and products according to the result of the ABC method. The system was first launched in 2000.

⁷⁰ The research team was invited to assist a presentation of operational and implementation aspects. Members of the port authority also showed the operations of the system in real time.

Table 2-78: End products of the ABC system of the Antwerp Port Authority with relative importance in the global costs (FY2003)

Cost object	100%
Exploitation of the port infrastructure	45,65%
Of which:	
<i>Concessions</i>	11,71%
<i>Port Decree</i>	18,54%
Of which:	
Sea locks	5,71%
Harbour master services	3,77%
Mooring facilities	1,02%
Maritime access	4,91%
Access roads	3,13%
<i>Waterborne traffic</i>	15,39%
Of which:	
Inland navigation	1,33%
Maritime traffic	14,06%
Operational services	19,56%
Of which:	
<i>Electricity network</i>	4,75%
<i>Towage</i>	11,31%
<i>Floating cranes</i>	1,29%
<i>Shore cranes</i>	2,20%
Auxiliary services*	4,26%
Overhead	26,11%
Of which:	
<i>Overhead</i>	5,26%
<i>Pension fund liabilities</i>	20,86%
Projects**	4,42%

* E.g. Detached personnel, training and consulting, external accounting, etc..

** E.g. Port festival, ecological projects, Deurganckdock project, etc.

Source: Antwerp Port Authority (2005)

Table 2-78 shows that the overhead is high at 26%, this is due to the temporary flow of funds to the pension fund reserve, and which is considered as overhead, as there exists no meaningful and causal link with the present link as it concerns personnel of the former municipal services. This object will disappear from the overhead when the pension fund obligations are fulfilled. The 'real' overhead will then be brought back to about 5,3%.

2.12.2.2.6 A case-study on project related funding: the Deurganckdock

2.12.2.2.6.1 Background

The steady growth of traffic volumes in general, and more specifically container volumes, throughout the 1970s and 1980s had lead to the construction of several quays on the Right Bank of the river Scheldt, behind the locks. In the middle of the 1980s, the necessity of faster handling and the development of container liner shipping necessitates the construction of quays on the Right Bank along the river, before the locks. These construction works led to

the saturation of available space for container handling on the Right Bank. As a consequence, new port development for container handling would have to take place on the Left Bank. Furthermore, traffic forecasts made in 1995 showed a need for an additional quay length of 4,85 km if the port were to be able to handle container growth until 2015. At present, the evolution of container traffic growth has shown that despite considerable improvements in handling techniques, re-engineering of existing terminals and higher spatial productivity, this need was justified and will – according to current forecasts – probably reach its maximum capacity around 2012. After the study phase, which among other studies consisted of a Social Cost Benefit Analysis (SCBA) and an Environmental Impact Assessment (EIA), the Flemish Government took the decision to build the dock in 1998.

For the Flemish Region and the Port of Antwerp, the project consisted of:

- The construction of quays, including dredging works;
- The construction of road infrastructure giving access to the terminals;

Construction of approx. 5000m of quays would take place in three phases.

Besides the construction of the quays, investments were to be foreseen for rail access infrastructure, ecological compensations and a social guidance plan for the inhabitants of the village of Doel, which would be expropriated. All these investments were to be financed by either the Flemish Region, the Port Authority or the Belgian rail operating company NMBS/SNCB. A detailed table of the costs is provided in section 3.12.2.2.6.3.

2.12.2.2.6.2 Project history

Table 2-79 shows a scheme with the different stages and milestones of the realization of the Deurganckdock until July 2005.

Table 2-79: Project realization

1995	
September 21st	Initial note of the Flemish Administration
1996	
February 14th	Definition of the area for habitats
October 23th	Social Cost Benefit Analysis
1997	
January 31st	Approval of the Environmental Impact Analysis
1998	
January 20th	Approval of the Flemish Government
November 5th	Introduction of the building permit
1999	
March 2 nd	Port Decree
March 8th	Notification to the European Commission
July 1st	Financing agreement between the Flemish Region and the Port
August 24th	Approval of the building permit
October 4th	Start of the construction of the quays
2000	

May 31st	First building permit withdrawn
June 13th	Second building permit approved
2001	
March 7th	Second building permit withdrawn
March 9th	Construction works are stopped
October 10th	Actualisation of the EIA is approved
December 14th	Validation decree of the Flemish Government
2002	
April 12th	Re-start construction works
2003	
May 5th	Start of dredging works
2005	
July 5th	Inauguration of the first phase
2007	End of the construction works.

Source: Report of the Belgian Court of Auditors ("Rekenhof") to the Flemish Parliament (2005)

Table 2-79 shows that the total project realization will take 12 years. The first phase was inaugurated on July 5th, 2005, approximately 10 years after the initial start of the preparatory study phase. Approximately two years were lost due to legal problems with building permits, as well as (the lack of) ecological compensation measures, despite the involvement of the different levels of government in the project and the decisions. This delay in the construction resulted in several claims from construction firms and other interested parties. Finally, an "urgent decree" (the so-called Validation Decree of December 14th, 2001) was issued, which stipulated that the Flemish Parliament would temporarily approve the building permits. This situation was ended on November 12th, 2004. The delay of the construction and resulting inflation, the higher cost of nature compensation as well as a number of modifications made during the construction works, have led to an increase of the total cost of 39% compared to the initial estimate.

2.12.2.2.6.3 Cost and financing structure of the project

Three parties finance the cost of the construction of the dock and its quays:

- The Flemish Region;
- The Port Authority;
- The Company for the Management of Land and Industrialization of the Left Bank of the River Scheldt.

At the start of the project in 1998, the Flemish Region has closed agreements with the different parties for several parts of the project, in accordance with the legislation of November 10th, 1993, which arranged the policy for subsidizing port investments (the new Port Decree, including new roles for subsidies for port investment projects was voted in March 1999). The main characteristics of these agreements were as follows:

- For the study phase, specific keys for repartition were fixed. The parties each also financed studies outside the agreements;

- For the quays, the Flemish Region finances 60%, in accordance with the legislation valid in 1998. The eventual claims for the delays will be treated according to the same rule.
- The Flemish Region entirely financed the dredging works;
- For the financing of roads, the Port Authority as well as the Flemish Region finance the construction, depending on the regional or local character of the road, as well as its location (inside or outside the seaport area).
- The Company for the Management of Land and Industrialization of the Left Bank of the River Scheldt is responsible for the expropriations, with prefinancing of the Flemish Region;
- Specific protocols and agreements were made for the financing of the ecological compensation works.

Table 2-80 gives an overview of the total project cost for the Flemish Region and the Port Authority, based on invested amounts as well as closed agreements (situation medio 2004).

Table 2-80: Overview of the invested amounts in the Deurganckdok project by the Flemish public sector

Type of cost	Total	Flemish Region	%	Others	%
Pre-studies	2.327.526,62	1.928.185,37	83%	399.341,25	17%
Additional Studies	1.518.036,69	637.191,36	42%	880.845,33	58%
Quays	247.972.313,10	147.956.670,13	60%	100.015.641,97	40%
Claims	28.212.482,57	16.587.495,95	60%	11.624.986,62	40%
Dredging	174.238.364,38	174.238.364,38	100%	0	0%
Other works	20.606.229,84	17.493.185,78	85%	3.113.044,06	15%
Roads	34.637.085,95	24.263.852,04	70%	10.373.233,91	30%
Expropriation	14.849.252,65	14.849.252,65	100%	0	0%
Social Guidance Plan	45.855.415,28	41.740.480,28	91%	4.114.935,00	9%
Nature compensations	24.099.379,54	15.374.650,14	64%	8.724.729,40	36%
Total	594.316.085,62	455.069.328,08	77%	139.246.757,54	23%

Source: Report of the Belgian Court of Auditors to the Flemish Parliament (2005)

More recent information in the national press, given by a director of the Flemish Administration, brings the total project cost for the public purse on 680 million euros (including rail infrastructure). According to information given by P&O Ports (concession holder on the East side of the dock) and PSA (concession holder on the West side), private investments are estimated at 930 million euros (respectively 530 million and 400 million euros). Total investment (public and private) amounts to approx. 1,6 billion euro, of which the public sector finances about 42%, and the private sector 58%.

As mentioned before, during the implementation and construction of the dock, the public financing legislation was changed due to the adoption of the Port Decree (March 2nd, 1999). Table 2-81 shows the old regulation, compared to the new regulation:

Table 2-81: Comparison of the old and new financing regimes

	quays	dredging for construction
Financing regime 10/11/1993	60%	100%
Financing regime 13/07/2001	30% (20% from 1/1/2004)	50%
Transitional regime for specific* projects until 31/12/2004	60% (Provided a detailed phasing and fixed maximum amounts)	100% (Provided a detailed phasing and fixed maximum amounts)

Source: Report of the Belgian Court of Auditors to the Flemish Parliament (2005)

* Zeebrugge: Wielingendok, Leopold II-dam, Zuidelijk insteedok; Antwerp: Deurganckdock, Verrebroekdock; Ghent: Kluizendok; Ostend: project Passendale and Voorhaven Oost.

The new regulation and financing regime does not allow further financing of specific port projects by the Flemish Region, with the exception of the third phase of the Deurganckdock.

Under the new financing regime, the amounts of financing for the Region and the Port Authority would differ substantially. Table 2-81 shows that the construction of the quays and dredging represents approx. 71% of the project cost. Applying the new financing regime to the same project in 2005, would, *ceteris paribus*, substantially change the total distribution of costs between the Port Authority and the Region. For the quays, the Port Authority would finance 198.377.851 euros (instead of approx. 100 million euros). For the construction dredging, the Port Authority would finance 87.119.182 (instead of nothing). The distribution of 77% Region / 23% Port Authority would, *ceteris paribus*, be changed to approx. 55% Port Authority / 45% Region. Furthermore, if the Port Authority was to pay all other cost categories (studies, roads, nature compensation, social guidance and expropriation), the distribution of costs financed by the public purse would be totally reversed to approx. 77% Port Authority / 23% Region.

The above calculation clearly shows that the new regulation under the form of the Port Decree and the resulting financing measures will substantially increase the financial and economic accountability of the Port Authorities for port development projects. The case of the Deurganckdock is a good example of future port development in the European Union, given the existence of similar projects within the EU, such as the Maasvlakte 2 project in Rotterdam, the Port 2000 project in Le Havre as well as the FOS2XL project in Marseilles. The Port 2000 as well as the FOS2XL project will be analyzed in the country report for France. This will result in a comparison of the Belgian and the French situation with regard to the financing of port development projects.

2.12.3 Work package II: Financial flows from the private to the public sector

2.12.3.1 Task II-a: Charging practices related to port operators in Belgium

2.12.3.1.1 General framework for port operators

As the Flemish seaports are all autonomous companies, they have a large degree of liberty in terms of charging to port operators. In general, the interviews with port representatives in the ports of Antwerp and Zeebrugge, pointed out that charging for concessions is driven by market forces, as all Flemish ports operate in a highly competitive market (Hamburg – Le Havre range). The respondents also pointed out that the concession dues policy forms part of the broader commercial strategy of a port, which depends on trends in the immediate market (e.g. policies of other ports) as well as general economic tendencies (e.g. containerization). Concession dues (typically paid by port operators), together with port dues (typically paid by ship operators) form part of the total “pricing mix” of a port and are on a port policy level treated as different sides of the same coin. In other words, as the evolutions on the sea-side of the market have an influence on the land side, it is very difficult to make a separate assessment of the concession pricing of a port, as a port can temporarily decide to decrease concession dues while increasing port dues, but remaining stable on the general level of revenues in view of the recoup of their investments, their costs for the provision of services as well as their general overhead costs.

In general, the main flow between Flemish port authorities and port operators consists of the concession dues paid by the port operator for the supply of land, as all seaports are organised following the landlord model. Other flows from the port operator include the charges for the provision of (intermediary) services (e.g. crane services in Antwerp, payment of real estate tax on behalf of concession holders in Zeebrugge) as well as the charges for electricity supply in some cases (following the deregulation of the electricity market, see section 3.12.2.2.3.).

In the next section, we will describe the charging practices in the Port of Antwerp.

2.12.3.1.2 Charging practices and flows in the Port of Antwerp for port operators

2.12.3.1.2.1 Concessions (revenue for land and superstructures)

The tariffs and general conditions of the concession of quays, sites, sheds, parkings, etc. are approved by the Board of Directors and are publicly available documents. The adjudication of concession of quays and sites is subject to an open and transparent procedure. To obtain a concession of a quay, interested companies typically submit a tender with a business plan which contains the superstructure investments, as well as a traffic forecast. The Port Authority will evaluate the different tenders and decide on the basis of an in-depth economic evaluation (tonnage, employment, investments, contribution to the port strategy, etc.) on the terms and condition of the concession (number of years, minimum guaranteed tonnage, etc.).

The general terms and conditions for concession are split up in two documents, according to the nature of the site:

- On the one hand, the Port Authority defines ‘**quays and sheds**’, which are the quays together with the surface delimited by the first public road;

- On the other hand, the Port Authority defines '**grounds**', which are all other sites except the 'quays and sheds'.

With regard to tariffs and specific conditions, both types of concession are specifically regulated by an official document⁷¹ approved by the Board of Directors. As a supplement, there exists a general document on the concession of sites and warehouses.

For **quays and sheds**, Table 2-82 shows the tariffs (or range of tariffs) applied since January 1st, 2004:

Table 2-82: Concession tariffs for quays and sheds

Type of concession	Tariff (euro/m2)
FOR NON-BULK GOODS:	
Sheds	
Closed sheds	10,68 – 11,25
Open or partially closed sheds	8,26
Quays with a hard surface	4,41 – 4,61
Quays with a soft surface, of which:	
- General tariff	2,55
- Container quays along the river Scheldt	5,12
FOR BULK GOODS AND OTHER PURPOSES	
Sheds	
Closed with brick/concrete walls and a hard floor	30,98
Other	29,36
Open	14,69
Quays	
Quays with a hard surface	8,76 - 9,15
Quays with a soft surface	
- General tariff	4,31 – 5,12
- Container quays along the river Scheldt	10,24
FOR PARKING	
<i>Traffic generating companies</i>	
Quay with a soft surface	4,85
Quay with a hard surface	7,79
<i>Service providing companies</i>	
Quay with a soft surface	7,19
Quay with a hard surface	11,62

Source: Antwerp Port Authority

For the container quays, this tarification means that a quay behind the locks is rented at 4,61 euro/m2 for a hard quay. Container quays along the Scheldt river (before the locks) are

⁷¹ For quays: "Verordening op het benutten van de kaaien en de afdaken" (Board of Directors of 16/12/2003, valid from the 1st January, 2004). For grounds: "Verordening op het gebruik van gronden" (Board of Directors of 16/12/2003, valid from the 1st January, 2004).

rented at a tariff of 5,12 euro/m². For new quays, such as the Deurganckdok, the tariff of 5,12 euro/m² is applied, as no locks have to be passed.

However, as was already mentioned, the tariff policy for concessions can be changed if market conditions change.

Article 15 of the tariff document on quays and sheds along the Scheldt and in the docks also states that grounds⁷² which are given in concession can only be used for:

- Short storage of non-bulk goods (unloaded or to load) for maritime vessels, for which the concessions holder holds the right to treat them;
- The storage of bulk goods (unloaded or to load) for maritime vessels, for which the concession holder holds the right to treat them.

A short storage means 21 calendar days for the unloaded non-bulk goods, 42 calendar days for non-bulk goods to load (excluding the loading time).

For a quay where the mooring facility and the surface until the first public road have a functional economic link, unloaded goods as well as goods to be loaded can be freely stored for 10 days, after which “quay dues” are to be paid to the Port Authority. Table 2-76 shows the quay dues per day.

Table 2-83: Quay dues

• Under a shed:	0,24 EUR per m ² per day
• On a hard surfaced quay:	0,16 EUR per m ² per day
• On an open and soft surfaced quay:	0,08 EUR per m ² per day

Source: Antwerp Port Authority (2004)

Furthermore, it is noteworthy that article 21 states that if a quay or another mooring installation is not occupied by a maritime vessel for which the concession holder holds the rights to treat it, the Port Authority can at any time allow other maritime vessels to use the quay and/or mooring installation and use the unused storage area. In that case, any dues collected by the Port Authority are divided between the concession holder and the Port Authority.

For **land surface**, Table 2-84 shows the tariffs (or range of tariffs) applied since January 1st, 2004. Land surface can be used for a wide array of activities, such as the storage of maritime goods, parking of movable assets, the placement of movable warehouses, etc. If the ground is to be subject of a construction or any other installation, the Port Authority must grant a permit.

⁷² There exist quays where the activity has no functional link with the mooring facility, and are also separated in materiel terms from the (exploitation of) the mooring facility.

Table 2-84: Tariffs for concession of land surface

Type	Hard surface (euro/m2/year)	Soft surface (euro/m2/year)
Traffic generating activities (storage of maritime goods)	2,87	5,15
Service providing activities to traffic generating activities	4,08	6,53
Other service providing activities and storage of goods which are exclusively transported on land	5,15	7,68
Parkings:		
- For traffic generating activities:	4,85	7,79
- For service providing activities:	7,19	11,67
Production activities (industry)	2,17	3,78

Source: Antwerp Port Authority (2004)

The tariff structures for land surfaces, as well as quays and sheds, show that:

- A clear distinction is made between maritime activities and activities of storage of goods which are exclusively transported via land;
- Soft surfaces are always cheaper than hard surfaces;
- Complementary functions, such as parking facilities, have a high tariff. It can be assumed this measure is to discourage the creation of such facilities in order to gain space and achieve higher spatial productivity.

It is also noteworthy that the real estate or property tax is pre-paid by the Port Authority. It could be argued that this is an advantage to the port operators and/or companies. However, a change in this situation (i.e. the tax being paid directly by the port user to the public purse) would probably lead to a lowering of the concession prices by the Port Authority. For both the private port user as well as the Port Authority, the net result would be zero (the Port Authority lowering its concession revenue but also decreasing taxes to be paid, the private operator increasing taxes to be paid, but the cost of the concession being lowered).

Finally, it has to be mentioned that concession pricing policy is a rather dynamic issue in ports as due to the scarcity of space in ports and the related strategic priorities of the port under consideration, concession pricing is a strong tool in order to reach strategic objectives. For example, if the port gives absolute priority to container transshipment, it could decide that value added logistics, as well as industrial activities and their specific logistical support activities would have to pay more for their concessions as an opportunity cost for possible container development being lost for the Port Authority.

For the years 2002, 2003 and 2004, the volume of concession dues collected by the port authority is given in Table 2-85:

Table 2-85: Concession dues for the years 2002, 2003 and 2004

Year	Amount (million euro)	% of turnover
2002	74,1	38%
2003	78,7	39%
2004	80,34	39%

Source: own calculations (2005) based on the annual reports of the Antwerp Port Authority

2.12.3.1.2.2 Dues for other services

Other services provided by the Port Authority to port operators lead to operating income. It concerns:

- Electricity;
- Charges for shore cranes and floating cranes, based on the number of shifts and the type of equipment. Cranes can also be given in concession for 1 to 5 years.

Table 2-86 shows the turnover earned for these services by the Port Authority in the years 2002, 2003 and 2004, as well as the importance (in %) in the total turnover of the Port Authority.

Table 2-86: Charges for other services (2002, 2003, 2004), million euro

Service/Product	2002	2003	2004
Electricity	13,6 (7%)	12,1 (6%)	12,4 (6%)
Cranes	5,8 (3%)	6,0 (3%)	6,18 (3%)

Source: own calculations (2005) based on the annual reports of the Antwerp Port Authority.

2.12.3.2 Task II-b: Charging practices related to ship operators in Belgium

2.12.3.2.1 General framework for ship operators

As for concession dues, the Flemish Port Authorities have a large degree of freedom to define their port due pricing system, as they are all autonomous companies. Given the location in the Hamburg – Le Havre range, pricing strategies are very competition-driven and every port tries to attract cargo, taking into account its competitive position for different cargo categories in the range (containers, dry bulk, liquid bulk, ro-ro, general cargo).

In general, the port authorities receive port dues from ship operators as well as revenue for the provision of services, which are considered to be of general interest for safety reasons (e.g. tugging inside the port area) or where specific market failures occur (e.g. a fire-fighting boat on stand-by). Other services are performed by the private sector (e.g. mooring and unmooring). Services linked to the maritime access to the port area are provided by the Flemish Region (e.g. pilotage), or are performed by the Port Authority on behalf of the Flemish Region and for which the Port Authority gets an exploitation subsidy (see supra).

Inside the port, the Port Authority is responsible but has given the pilotage activity in concession to CVBA BRABO, a private company which employs pilots and boatmen for mooring and unmooring. CVBA BRABO has a concession agreement with the Port Authority, by which it is authorised to organise the harbour pilot service inside the locks of the Antwerp port, which refers to article 10 of the Municipal Police Regulations of the port of Antwerp. This article mentions that in view of the need to police and with a view to the maintenance of public order and the safety of business of the port in general and of shipping traffic in particular, the piloting of seagoing ships is regarded as a task of the Port Authority. Nevertheless, the Antwerp Port Authority may decide to grant a concession for this service to a third party who complies with those conditions as may be determined by the Antwerp Port Authority regarding the assurance of the safety of the navigation, the general quality and organization of this service, the minimum requirements for physical equipment and the numbers and professional skills of its personnel. The original concession dates from 1968 and was renewed in 2002. The new contract started as from January 1st, 2003 and covers a period of 8 years. The Port Authority has to approve the tariffs set by CVBA BRABO. The port of Zeebrugge applies a similar construction with regard to pilotage inside the port area. Here a subsidiary of CVBA BRABO, named CVBA Breydel, is active, but tariffs are set by the Port Authority, which also collects the money. After collection, 71,5% is portioned out to the self-employed pilots, which they distribute among them. There is no guaranteed income, so the pilots bear the full economic risk. The tariffs can be found in the tariff regulation of the port of Zeebrugge. For the port of Ghent, the situation is somewhat different as the port lies on an inland canal. As a result, the canal pilots from the Flemish Administration perform the service from/to the docks of the port.

For pilotage outside the port area, the Flemish Government has set up an autonomous public agency ("DAB Loodswezen") which became operational in January 2001. The organisation and the operational aspects of the Flemish Pilotage are set out in the "Piloting Decree" of April 19th, 1995 and the "Revised Scheldt Ruling" which became effective on October 1st, 2002. The principle behind this autonomous agency within the Flemish Administration was to develop the pilotage service as a high-performance and operational company with a transparent cost and pricing structure. Tariffs for pilotage are set in coordination with the Dutch and Flemish Governments and publicized in the Belgian Official Gazette. Belgian and Dutch public pilot services also share boats and helicopters, the allocation of vessels being regulated by a treaty. Vessels which use the services of a pilot pay a piloting fee depending on the draught of the ship as well as distance and route of the piloting. Additional fees are charged for other or additional services (helicopter, shore based pilotage, etc.). Frequency discounts can be negotiated with the company. The tariffs for pilotage are publicly available on the website of the company.

With regard to the port dues, as well as the services performed by the port authorities, public documents are available either on the website of the port in question or by demand to the commercial services. In general, these documents have a validity of one year and are revised in function of market dynamics in the relevant cargo sectors (in particular for port dues).

Analyzing the tariff structure of port (or also called maritime) dues in the Flemish seaports, port dues typically consist of two types:

- Dock dues or tonnage dues, linked to the indivisible size of a ship in tonnage and the period of stay in the port;

- Mooring dues, linked to the volume of cargo handled.

Whereas dock dues (also called tonnage dues) (“tonnenmaat- of dokrechten”) in principle do not make a distinction between cargo types or ship types, mooring dues (also called cargo dues) (“aanlegrechten”⁷³) are very different according to the cargo type and are levied on the real traffic volume, i.e. per ton or per unit (e.g. TEU or ro-ro units). Nevertheless, very specific policies can exist to favour one or more traffic categories for which the port sees a growth potential. For example, for 2005 the port of Ghent simultaneously decided not to levy dock dues and to lower mooring dues for short-sea container vessels in a substantial way, in order to stimulate the use of short-sea instead of competing modes such road transport, and really attract the cargo to the port instead of seeing it bypass the port (see De Lloyd, 2004; and Port of Ghent, 2004). The port reasoned that a temporary lowering of the dues for these services could attract the necessary start-up volumes. This is only one example of a commercial pricing strategy. Analysis of the documents shows that all ports apply rebates on both tonnage dues as well as mooring dues for different ship types and/or cargo categories. In the case of tonnage dues, a rebate can be obtained if a certain volume of trips of the same vessel (or vessels from the same ship operator) is reached. In the case of mooring dues, rebates based on volume can be obtained.

With regard to the unit of pricing, there is no system uniformity as some ports levy dues by the tonne (for bulk, container goods and general cargo), by the unit (for ro-ro, containers and general cargo) or even by the metre (lane metres for ro-ro).

Besides port (or maritime) dues, there also exist inland navigation dues for inland going vessels. These dues can depend on the type of trade (container, mobile units or others) and consists of either a fixed payment for a period of stay (containers), a payment per lane metre or per cubic metre, or a combination (e.g. a fixed payment and payment per cubic metre). They can also vary if the vessel or the inland shipping company intends to have a single, or multiple stays in the port over a certain period.

The analysis of the publicly available documents on the tariff systems in the port show a common general framework, but very specific implementation. Although there exists a clear separation between the services performed outside the port area (e.g. pilotage) and inside the port area (e.g. mooring), the specificity of each port in terms of size and dominant cargo types results in differences between the ports in terms of the number and also types of services offered to ship operators. However, all complementary services are priced in a transparent way in publicly available documents. In the next section, we will describe and analyze how the port of Antwerp implements its pricing policy, and accounts for the different end-products it offers to ship operators, including the numbers for the years 2002, 2003 and 2004.

2.12.3.2.2 Charging practices and flows in the Port of Antwerp for ship operators

The revenues collected by the Port Authority from ship operators fall under these categories:

- Maritime traffic: tonnage and mooring dues;
- Inland navigation dues;

⁷³ It has to be mentioned that mooring dues are in this case not linked to the performance of the mooring service “as such”, but are part of the port due that is linked to the amount of cargo that is handled while the ship is present (“moored”) in the port.

- Tugging services inside the docks;

With regard to port (or maritime) dues, these are composed by two types:

- Tonnage dues, defined as an indivisible payment based on the tonnage size of the vessel;
- Mooring dues, based on the tonnage of the goods loaded/unloaded in the port.

With regard to *tonnage dues*, a distinction is made between:

- The type of ship:
 - Container vessels under GT⁷⁴ 20.000;
 - Container vessels above GT 20.000;
 - Post-panamax container vessels;
 - Reefer ships;
 - Ro-ro ships and car ships;
 - Tankers with separated ballast tanks;
 - Tankers without separated ballast tanks;
 - Bulk and general cargo ships;
 - Others.
- Liner shipping versus non-liner shipping;
- Mooring on the Scheldt versus mooring inside the docks (behind the locks);
- Deepsea (“transoceanic”) versus shortsea.

With regard to *mooring dues*, a distinction is made between deepsea and shortsea services, with a discount for the latter, as well as the possibility for a discount if in the case of a bulk ship 70% of the loaded/unloaded cargo is treated with a maximum of 120 000 tonnes as calculation base.

With regard to *inland navigation dues*, the following distinction is made:

- Dues resulting from a stay inside the port, based on a small fixed minimum amount and a variable amount depending on the loaded/unloaded tonnes;
- Dues resulting from transiting the port (without a stay), based on a small fixed minimum amount, and a variable amount depending on the loaded tonnes; for empty ships a fixed amount is set depending on three size categories.

⁷⁴ GT: Gross Tonnage

With regard to *tugging services*, the tariff is based on the gross tonnage (GT) of the ship (cubic metre for inland navigation) as well as the distance covered inside or between port areas.

For 2002 – 2004, Table 2-87 shows the revenue of port dues, inland navigation dues and tugging services, as well as the relative importance (in %) in the turnover of the port.

Table 2-87: Port dues, inland navigation dues and tugging services in the port of Antwerp

Service/Product	2002	2003	2004
Port dues	64,3 (33%)	68,3 (34%)	70,0 (34%)
Inland navigation dues	7,8 (4%)	6,03 (3%)	6,18 (3%)
Tugging	29,2 (15%)	28,1 (14%)	28,8 (14%)

Source: Own calculations (2005), based on the annual reports of the Antwerp Port Authority

2.12.3.3 An analysis of the breakdown of the revenue and the cost structure of the Port of Antwerp

2.12.3.3.1 Revenue structure

2.12.3.3.1.1 Public funding

Table 2-88 shows the amount of public funding under the form of **exploitation subsidies** received by the Antwerp Port Authority during the years 2001 - 2004.

Table 2-88: Exploitation subsidies

Year	Amount (million euro)	Total operating income* (million euro)	% of total operating income
2001	2,38	224,71	1,1
2002	2,98	219,27	1,4
2003	5,37	227,05	2,4
2004	98,0	332,18	29,5
Average	27,18	250,80	10,8
Average excl. claim	22,96	246,58	9,3

* Includes turnover, increase/decrease of stocks, produced fixed assets and other operating income (includes exploitation subsidies).

Source: Own calculations (2005) and annual reports of the Port Authority.

Table 2-88 shows a big variation in the total operating income in 2004. This is due to (1) the payment by the Flemish Government of 60% of the realized claims for the construction groups of the Deurganckdok project (see supra), i.e. an amount 16,9 million euros (2) the positive advice of the European Commission on the notification of a number of public funding measures resulting from the Port Decree, for the years 2002, 2003 and 2004. The Flemish Region eventually paid these amounts (a total of 72 million euros for the Port of Antwerp) in February 2005. The full amount was booked as a result in 2004, but 47,3 million needs to be

allocated to 2001, 2002 and 2003. Therefore, the use of an average gives a better indication. The average shows that in the period 2001-2004, 10,8% of the operating income of the port was public funding under the form of exploitation subsidies for services of public interest performed by the port authority. If the claim for the Deurganckdok project is excluded (as that can be considered as an exceptional event), this percentage drops to 9,3%.

The treatment of **capital subsidies** received by the Port Authority is done according to general accepted accounting principles, i.e. for each asset (e.g. docks, quays, etc.) which benefited from capital subsidies, these subsidies are activated in the yearly financial result of the port according to the depreciation rules for the asset in question.

Table 2-89 shows the allocation (or activation) of received capital subsidies to the result of the port for the period 2001-2004

Table 2-89: Allocation of capital subsidies to the result for the period 2001-2004

Year	Amount (million euro)
2001	14,1
2002	11,4
2003	11,5
2004	10,7

Source: Annual reports of the Port Authority

The Antwerp Port Authority does not receive any **interest subsidies** from the Flemish Government. As was mentioned before, financing of infrastructure projects such as the Deurganckdok is done by investment grants of the Flemish Government, self-financing of the port as well as loans at market terms via the commercial banking system.

2.12.3.3.1.2 Turnover

The turnover of the port is composed of the products and services of the port, for which the costumers of the port (port operators as well as ship operators) compensate by paying charges. The main revenue categories of the port are:

- Concession dues;
- Port dues;
- Inland navigation dues;
- Tugging charges;
- Electricity charges;
- Crane charges;
- Other.

Table 2-90 shows the total turnover for the years 2002 - 2004 as well as the relative importance of the different revenue categories of the port.

Table 2-90: Turnover and relative importance of revenue categories

	2002	2003	2004
Turnover (million euros)	194,7	200,9	205,9
Concession dues (%)	38%	39%	39%
Port dues (%)	33%	34%	34%
Inland navigation dues (%)	4%	3%	3%
Tuggering charges (%)	15%	14%	14%
Electricity charges (%)	7%	6%	6%
Crane Charges (%)	3%	3%	3%
Other (%)	0%	1%	1%

Source: Annual reports

Table 2-90 shows that the Antwerp Port Authority has a relatively stable revenue structure. We were able to compare this to the results of the Port Authority of Zeebrugge, based on an annual report for 2003 and an interview with port representatives.

2.12.3.3.1.3 Comparison Antwerp – Zeebrugge

Table 2-91 shows the turnover and revenue structure of the port of Zeebrugge.

Table 2-91: Turnover and revenue structure of the Port of Zeebrugge (2003)

	2003
Turnover (million euros)	33,4
Concession dues (%)	35%
Port dues (%)	32%
Intermediary services and overhead* (%)	25%
Other (%)	8%

* Tuggering, pilotage, payment of real estate tax.

Source: Own calculations (2005), based on the Annual Report 2003 and interviews.

Table 2-91 shows that both revenue structures show great similarities with regard to the relative share of concession dues and port dues in the overall result. With regard to the provision of other services, the comparison is difficult given the different operational models in both ports. In general, concession and port dues contribute approx. 70% to the turnover of both ports, while the provision of services (or the activity of being intermediary for the service) adds approx. 25%.

With regard to public funding, the port of Zeebrugge receives exploitation subsidies as well as capital subsidies. For the years 2002 and 2003, **exploitation subsidies** for services performed in execution of the Port Decree amounted to respectively 1,64 million euros and 1,67 million euros. Of course, this needs to be corrected for the positive advice of the European Commission on the notification of the Flemish Government (see supra). Furthermore, a comparison in terms of percentages of operating income is difficult, given the different physical characteristics of both ports, Antwerp being a river port, Zeebrugge being a coastal port. With regard to **capital subsidies**, respectively 3,24 million euros and 3,51 million euros were activated in the financial result.

2.12.3.3.2 Cost structure

The operating costs of the Antwerp Port Authority can be divided in a number of principal categories:

- Purchase;
- Services and other goods;
- Personnel costs;
- Depreciation;
- New provision and write downs;
- Other operating costs.

Table 2-92 shows the total operating costs of the Antwerp Port Authority for the period 2002-2004, with the share of the different cost categories.

Table 2-92: Total operating costs and share of the cost categories

Cost category	2002	2003	2004
Total operating cost (million euro)	224,3	231,9	334,4
Purchases (million euro, %)	6,7 (3%)	1,9 (1%)	2,0 (1%)
Services and other goods (million euro, %)	37,9 (17%)	53,4 (23%)	57,7 (17%)
Personnel costs (million euro, %)	130,7 (58%)	122,6 (53%)	205,2 (61%)
Depreciation (million euro, %)	36,9 (16%)	35,8 (15%)	49,0 (15%)
New provision and write down (million euro, %)	-17,6 (-8%)	-2,8 (-1%)	7,4 (2%)
Other operating costs (million euro, %)	29,7 (13%)	20,9 (9%)	13,1 (4%)

Source: Own calculations (2005), based on annual reports

Table 2-92 shows that personnel costs have the largest share (between approx. 55 and 60%). The increase in the operating cost is due to a very large payment to the pension fund in 2004 compared to 2003 (operating income also increased substantially due to the positive advice of the European Commission). The costs for the pension fund are added to the personnel cost. The rise in depreciation in 2004 is due to an exceptional cost for underwater cells to store dredging mud. As these cells won't be fully used for own purposes due to the Port Decree, the value of this investment needed to be decreased substantially (8,7 million euros).

Provisions are made for claims for the Deurganckdok as well as specific ecological compensation. Nature compensation costs are also activated in the 'services and other goods' component. This explains to a large extent the rise of this category between 2002 and 2003, when 7 million euros were spent on ecological compensation. The main components of 'other operating costs' are taxes such as real estate and water collection, as well as compensation paid to third parties.

A comparison with the port of Zeebrugge is less appropriate here as the operational model is different, in particular with regard to the provision of services (e.g. Zeebrugge has no crane company). Therefore, personnel cost make up approx. 25% of the operating costs, also because the Port of Zeebrugge has had no 'heritage' from the city of Bruges in terms of

pension funding. In contrast, 'services and other goods' have a share of 40 to 60% in the cost structure.

2.12.3.3.3 Summary: revenue versus costs

Table 2-93 shows the results of the years 2002 to 2004 for the Antwerp Port Authority.

Table 2-93: Results of the Antwerp Port Authority

in thousand euro	2002	2003	2004
Operating income*	219.273	227.048	332.178
Operating charges	(224.274)	(231.853)	(334.400)
Operating result	(5.001)	(4.805)	(2.222)
Financial income**	13.401	13.218	13.221
Financial charges	(7.556)	(7.691)	(8.870)
Result on ordinary activities	844	722	2.129
Extraordinary income	2.355	1.825	208
Extra ordinary charges	(878)	(239)	(31)
Result before taxes	2.321	2.308	2.306
Taxes	(21)	(8)	(6)
Profit/loss for the FY	2.300	2.300	2.300

* Including exploitation subsidies

** Including activation of capital subsidies

Source: Antwerp Port Authority, annual report 2004

Table 2-93 summarizes the observations and analysis on the revenue and cost structures of the port. The identical profit/loss during the last years (and for the years to come) is due to the contribution to the pension fund, which is an obligation from the CDV (Insurance Commission). The profit/loss of 2,3 million consists of the legally required reserve, as well as the agreed dividend for the city of Antwerp. The fulfilment of the pension fund obligation in the coming years will improve the result on ordinary activities in the coming years, and improve the financial position of the port. At present, the focus lies on efficiency improvements and cost management, the ABC system (see supra) helping the port management to keep close track of any unwanted evolutions, and showing detailed profit and loss accounts for each operational activity.

2.12.4 Conclusions

The Port Decree, voted in 1999, has defined a clear legal and organisational framework for the relation of the Flemish Government with the seaports in its territory. Besides a clear framework, new guidelines for public financing were adopted, characterized by a greater accountability of the port authorities with regard to the development of new port infrastructure. Percentages of public financing for large development projects (docks, quays) will drop substantially. With regard to exploitation subsidies, these are granted for dedicated services with regard to maritime access port authorities perform on behalf of the government. The analysis performed based on the ABC system of the port of Antwerp showed that the exploitation subsidy does not entirely cover the real costs of the port authority, so part of the cost for these public services is recuperated from port users. These activities are also carried out via separate accounts as the port authorities need to justify the real costs (e.g. for dredging, the volume), after which the last part of the subsidy is granted (ex-post, and never higher than the ex-ante calculation of the government).

For the activities related to the exploitation and management of the port infrastructure, as well as services such as crane renting and tugging, these activities are carried out on a full-cost recovery basis. With regard to the port of Antwerp, the figures have to be interpreted with care as the Port Authority needs to build up the pension reserves which the City of Antwerp failed to build in the past, and which the Port Authority inherited after the creation of the autonomous municipal company. As a result, large parts of operating income are allocated to the creation of these minimum pension reserves (legal obligation imposed by the State), which need to be financed by the turnover (port dues, revenues from land, etc.).

With regard to the revenue and cost structure, these structures are very stable but can be different depending on the port (river versus coastal ports, provision of different services, etc.). For the port of Antwerp, cost structures have to be interpreted with care as personnel costs can vary substantially due to the pension fund obligation vis-à-vis the State. With regard to revenue structures, these are dominated by port dues and revenues from land leases, as the ports do not perform cargo handling themselves. The relative share of port dues and concession revenue is about equal (+/- 40% for Antwerp, +/- 35% in Zeebrugge), but the port authorities stated that charging practices are based on market evolutions and that these revenue shares can change in the mid- to long term.

With regard to the future financing of infrastructure projects in ports (docks, quays), recent government declarations point out that no subsidies will be given to large scale future developments similar to the Deurganckdock project. The Flemish Government has the clear intent to withdraw totally from the financing of these kinds of port infrastructure (docks, quays). As a result, though the Port Decree states that the Flemish Region can finance up to 20% for a new multi-user quay in the future, these financial sources won't be available and the port authority will need to finance fully such projects using its own means and borrowed capital. With regard to maintenance of (multi-user) mooring facilities along maritime access channels, where the Flemish Region intervenes for 20%, there have been clear signals that this form of public finance will also disappear in the near future. As a result, the Flemish Region will only finance the maritime access to the ports, and part of the hinterland connections via roads. With regard to rail infrastructure, port accesses are financed by the Federal State (through Infrabel), but with a clear tendency towards public-private partnerships and charges to be levied for new infrastructure (e.g. tunnels). With regard to rail infrastructure on maritime terminals and quays, if financed by Infrabel, yearly dues will need to be paid in relation to the rail volume in order to recuperate the costs or to enhance the accountability of the port user with regard to the use of its rail infrastructure.

With regard to accounting and financial transparency, quasi-total transparency is observed from the port authorities as well as from the Flemish Region. For the port authorities, this transparency is characterised by annual reports and accounting according to general principles of accounting prevailing in private firms. The websites and annual accounts and reports contain a large amount of quantitative as well as qualitative information on the financial situation and the financial evolution of the port. Valuation rules are published, as well as separate declarations on the amount of public finance received and the use of these sources (for exploitation as well as investment). For example, depreciation resulting from capital subsidies from public authorities are clearly separated from the activation of "own" investments by depreciation. Furthermore, insights were given in the internal analytical accounting processes (e.g. the ABC system of the port of Antwerp), and are provided in this report. For the Flemish Region, transparency is observed as all State aids to seaports are

notified to the European Commission. With regard to the charging for maritime access services, information regarding tariffs can be found on the websites of the autonomous departments (e.g. pilotage) or firms (e.g. tugging) which provide these services.

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2.12.6 Annex: Inventory of infrastructures and technical equipment in the port of Antwerp (1/6/2004)

Source: Antwerp Port Authority and the companies concerned

AREAS

total area of the port complex	13,455 ha (Right Bank 7,655 + Left Bank 5,800)
<i>of which</i>	
water area of the docks	2,109 ha
industrial sites	3,674 ha
covered warehouse space (1)	498 ha

LENGTHS

total quay length	150.2 km

useful berthing length	120.6 km
<i>of which</i>	
docks	112.9 km
Scheldt quays	4,6 km
Scheldt container terminals	3,1 km
length road system	276.5 km
length of rail system	960 km

SPECIAL WAREHOUSES

coffee silos	6,440 t
silos for plastic granulates	491,660 m3
grain silos	288,000 t
dangerous cargo warehouses	153,300 m2
warehouses for fertilisers, grains and minerals	199,600 m2
cold stores	1,372,000 m3
baled tobacco warehouses	211,000 m2
china clay warehouses	28,000 m2
timber sheds	51.5 ha
Tank storage	
independent tank storage	2,849,337 m3
oil refineries	6,592,000 m3
independent LPG storage	159,000 m3
Container gantries	
maritime transfers (35 till 73 tonnes)	34
rail transfers	11
barge transfers	1

	46

CRANES AND DERRICKS

Shore cranes	Lift	
- electric cranes	2 – 5 t	41
	6 – 10 t	85
	11 – 50 t	78
	51 – 100 t	3

		207
- ship loading installations		30

		237
Floating cranes and derricks	up to 40 t	2
	of 150 t	1

	of 200 t	2
	of 800 t	1

		6
Gantries for bulk goods	5 t	3
	25 t	7
	50 t	2

		12

GRAIN ELEVATORS	14
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TUGS

dock tugs		21
river tugs (seagoing)		11

		32

LOCKS

	L	W	D
Zandvliet	500	57	17.75
Boudewijn	360.4	45	14.50
Van Cauwelaert	270	35	14.00
Royers	182.5	22	10.58
Kallo	360	50	16.00
Berendrecht	500	68	17.75

L = length between outer doors (in m)

W = width (in m)

D = max. sill depth at MHW (in m)

(1) Storage capacities of industrial firms are not included in the port storage capacity of sheds and warehouses.

2.13 France

2.13.1 General port sector organisation

2.13.1.1 Characteristics of the French port sector

The ports of France are located along the most frequently used maritime routes in the world: the North Sea, the Channel, the Atlantic Ocean and the Mediterranean Sea. The French ports play a major role in international sea trade.

The autonomous ports cater for 80% of France's maritime trade, in terms of tonnage, and they are in direct competition with the major international sea ports in Europe, as well as other French ports. There are six such authorities (not including inland ports and overseas ports): Dunkirk, Rouen, Le Havre, Nantes-Saint Nazaire, Bordeaux and Marseilles. Two other autonomous ports are inland ports: Paris and Strasbourg and two others are overseas ports: La Guadeloupe (French West Indies) and Papeete (French Polynesia).

Tables 2-94 and 2-95 show the traffic evolution for the most important autonomous seaports, both in tonnes (Table 2-94) and TEU (Table 2-95).

Table 2-94: Total traffic in the six French autonomous seaports, 1.000 tonnes, 1980-2004.

	Dunkirk	Rouen	Le Havre	Nantes-Saint Nazaire	Bordeaux	Marseilles	Total
1980	41.217	22.173	77.505	15.796	13.341	103.726	273.758
1981	37.629	21.297	71.829	14.273	12.037	97.041	254.106
1982	32.917	19.086	57.056	15.792	10.449	91.570	226.870
1983	30.161	20.174	53.526	20.172	9.447	86.617	220.097
1984	33.344	20.708	53.965	20.723	10.011	88.013	226.764
1985	32.167	22.104	48.734	22.856	10.579	89.523	225.963
1986	32.394	21.895	47.207	24.537	9.211	98.198	233.442
1987	32.364	21.057	51.145	24.628	9.446	91.263	229.903
1988	35.657	20.421	49.851	22.032	8.852	95.761	232.574
1989	39.141	21.497	52.239	23.984	9.150	93.420	239.431
1990	36.557	22.943	54.018	24.943	9.647	90.323	238.431
1991	40.737	23.696	57.220	25.162	8.806	89.359	244.980
1992	40.204	23.972	53.110	24.842	9.299	90.413	241.840
1993	40.822	23.617	54.916	24.752	8.800	87.306	240.213
1994	37.168	19.518	54.376	24.405	9.330	91.061	235.858
1995	39.379	19.828	53.782	23.800	8.906	86.611	232.306
1996	34.949	18.122	56.153	24.653	8.650	90.712	233.239
1997	36.547	20.005	59.691	26.119	8.363	94.265	244.990
1998	39.220	21.203	66.407	31.610	8.681	93.420	260.541
1999	38.281	24.087	63.922	28.795	8.941	90.258	254.284
2000	45.283	22.805	67.492	31.859	9.292	94.097	270.828
2001	44.450	20.744	68.970	30.315	8.965	92.372	265.816
2002	47.585	19.595	67.699	31.651	8.614	92.261	267.405
2003	50.088	21.851	71.493	30.836	8.394	95.544	278.206
2004	50.999	20.197	76.291	32.544	8.139	94.093	282.263

Source: Vlaamse Havencommissie (Flemish Port Commission)

Table 2-95: Container traffic in the six French autonomous seaports, TEU, 1980-2004.

	Dunkirk	Rouen	Le Havre	Nantes-Saint Nazaire	Bordeaux	Marseilles	Total
1980		97.753	507.289	1.138	43.834	296.000	946.014
1981		129.232	612.258	1.517	42.807	366.000	1.151.814
1982		138.888	536.031	2.305	45.632	365.000	1.087.856
1983		128.765	514.067	3.781	44.527	355.000	1.046.140
1984		127.905	613.633	8.099	40.205	380.000	1.169.842
1985		134.884	565.914	9.278	38.635	488.000	1.236.711
1986		120.174	598.739	10.651	36.487	474.000	1.240.051
1987		106.602	687.427	13.879	37.389	388.000	1.233.297
1988		102.515	788.949	12.975	36.499	391.000	1.331.938
1989		91.791	889.346	15.814	35.459	476.000	1.508.410
1990		92.931	858.385	19.553	31.624	482.000	1.484.493
1991	74.694	94.687	918.528	23.722	24.949	446.000	1.582.580
1992	49.781	89.374	746.388	33.243	19.024	350.000	1.287.810
1993	75.675	98.349	894.691	27.974	18.308	431.000	1.545.997
1994	60.723	122.421	872.939	31.759	19.226	437.000	1.544.068
1995	49.416	120.047	970.426	38.866	18.072	500.000	1.696.827
1996	52.860	122.863	1.020.040	59.418	29.379	548.000	1.832.560
1997	65.661	98.836	1.184.729	76.659	40.855	622.000	2.088.740
1998	81.229	98.694	1.319.278	91.081	44.737	660.000	2.295.019
1999	107.311	135.057	1.378.379	114.385	51.799	664.000	2.450.931
2000	148.531	145.590	1.464.901	116.471	53.000	722.000	2.650.493
2001	150.592	148.356	1.523.493	110.599	52.154	742.000	2.727.194
2002	160.816	144.177	1.720.459	110.208	47.711	809.000	2.992.371
2003	161.856	126.470	1.984.542	119.385	46.385	833.000	3.271.638
2004	200.399	139.202	2.150.000	124.169	50.671	916.000	3.456.272

Source: Vlaamse Havencommissie (Flemish Port Commission)

The organisation of French ports is of two main types, the second being divided into two categories:

- The autonomous ports (Dunkirk, Le Havre, Rouen, Nantes St. Nazaire, Bordeaux, Marseilles, Guadeloupe) are public bodies with a legal status and a high degree of functional and financial independence in port management and administration.
- Secondary and smaller ports. In this group it is necessary to distinguish between: a) 21 non autonomous ports of national importance (17 in mainland and 4 over-sea), which are managed through the authority of a senior civil engineer member of the "Ponts et Chaussées" body, appointed by the Minister of Public Works and are usually operated by the Chamber of Commerce ((Ports d'intérêt national: for example Calais, Boulogne, Dieppe, Caen, Cherbourg, Saint-Malo, Brest, Concarneau, Lorient, La Rochelle, Bayonne, Port-la-Nouvelle, Sète, Toulon en

Nice); b) 44 other minor commerce ports, that fall under the responsibility of Départements.

The “Code des ports Maritimes”⁷⁵ provides the legal basis for funding possibilities.

The “Ports Autonomes” are managed and administered by a board made up of 26 members, 3 represent the central state, 5 the local authorities, 5 the personnel of the port, 5 the local chamber of commerce and 7 are designated by the minister in charge of ports. Each autonomous port has a “Directeur”, appointed by a decree from the Council of Ministers. The Chairman of the Board is elected from its members.

In France, ports lands belong to the State under the special legal status of “*Domaine publique*”. That means that port areas are inalienable without prescription. They can be used either directly by the State or its administrations, or by private companies or private operators on the basis of a grant. The grant must be allowed for a certain period with the payment of a certain rent per year.

A law dated July 25th 1994 (integrated by the Decree 6/5/1995) has modified and updated the rules on the “*domaine publique portuaire*”. The most important point of this reform is the recognition of a real right in favour of the concession holders, on the structures, buildings, fixed equipment built by the concessions holders themselves to carry out the activities subject to concession. Furthermore, the law has granted the right to sell such real right, under the agreement of the competent Port Authority. This law has been designed to increase private investment on ports.

As a general rule, Port Authorities are not entitled to exercise operational activities. These activities are carried out by private stevedoring companies, which lease the land and the berth equipment from the Port Authority.

The main incomes of the “Ports Autonomes” are constituted by:

- rents paid by private undertakings for the grant of the port areas and/or for the use of equipment owned by the Port Authority,
- port dues,
- State contributions.

The situation of the Port of Marseilles is not different from the general situation of the “Port Autonomes”.

2.13.1.2 General Legal Framework

The organisation of French ports is of two main types, the second being divided into two categories:

⁷⁵ See a.o. Grosdidier de Matons, J., *Le régime administratif et financier des ports maritimes*, Paris, L.G.D.J., 1969, 542 p.; Rézenthel, R., “Le droit portuaire”, in Beurier, J.P. a.o., *Droits maritimes*, II, Lyon/Parijs, Les Editions Juris Service, 1995, 155 a.f.

- The autonomous ports (Dunkirk, Le Havre, Rouen, Nantes St. Nazaire, Bordeaux, Marseilles, Guadeloupe) are public bodies with a legal status and a high degree of functional and financial independence in port management and administration. They are supervised by the minister of maritime affairs and the minister of economics and finance.
- Secondary and smaller ports. Before the decentralisation law of August 13th, 2004, it was necessary in this group to distinguish between: a) 25 non autonomous ports of national importance (21 in mainland and 4 over-sea), which are managed through the authority of a senior civil engineer member of the “Ponts et Chaussées” body, appointed by the Minister of Public Works and are usually operated by the Chamber of Commerce ((Ports d’intérêt national: for example Calais, Boulogne, Dieppe, Caen, Cherbourg, Saint-Malo, Brest, Concarneau, Lorient, La Rochelle, Bayonne, Port-la-Nouvelle, Sète, Toulon and Nice); b) 44 other minor commerce ports, that fall under the responsibility of Départements (the equivalent of a NUTS3 region, e.g. provinces in Belgium). The decentralisation law will be discussed in the paragraph on the non autonomous ports.

In France, port lands belong to the State under the special legal status of “*Domaine publique*”. That means that port areas are inalienable without prescription. They can be used either directly by the State or its administrations, or by private companies or private operators on the basis of a concession grant. The concession grant must be allowed for a certain period with the payment of a certain rent per year.

A law dated July 25th 1994 (integrated by the Decree 6/5/1995) has modified and updated the rules on the “*domaine publique portuaire*”. The most important point of this reform is the recognition of a real right in favour of the concession holders, on the structures, buildings, fixed equipment built by the concessions holders themselves to carry out the activities subject to concession. Furthermore, the law has granted the right to sell such real right, under the agreement of the competent Port Authority. This law has been designed to increase private investments in ports.

As a general rule, Port Authorities are not entitled to exercise operational activities. These activities are carried out by private stevedoring companies, which lease the land and the berth equipment (suprastructures such as cranes, etc.) from the Port Authority.

The “Code des ports Maritimes”⁷⁶ provides the legal basis for the management of the different types of ports and the port system as a whole.

In this study, we will mainly focus on the Autonomous Ports, as the ports in the sample (Le Havre and Marseilles) are both Autonomous Ports. Nevertheless, an insight in the decentralisation law will be provided, as well as potential implications of the decentralisation law on the competition between the ports.

⁷⁶ See a.o. Grosdidier de Matons, J., *Le régime administratif et financier des ports maritimes*, Paris, L.G.D.J., 1969, 542 p.; Rézenthel, R., “Le droit portuaire”, in Beurrier, J.P. a.o., *Droits maritimes*, II, Lyon/Parijs, Les Editions Juris Service, 1995, 155 a.f.

2.13.1.2.1 Autonomous ports

2.13.1.2.1.1 Mission

The Code des Port Maritimes states that the administration of trade ports is granted to 'Ports Autonomes', which are created by decree. The criterion to be a 'Port Autonome' is the relative importance of the port, without a transparent threshold as regards importance being specified. The Autonomous Ports are public entities possessing legal personality and financial autonomy.

Autonomous ports are responsible for the construction, upgrading, renewal and reconstruction, exploitation, maintenance and security policy of the port and its dependencies and the unmovable assets inside the port area. The port area is defined by State decrees. However, the Port Authority can create new port zones or participate in such projects. For this matter, the Port Authority is subject to the same laws as the State with regard to public infrastructure works.

2.13.1.2.1.2 Organisation and management, boundaries between ports and administration.

The "Ports Autonomes" are managed and administered by a board made up of 26 members, 3 represent the central state, 5 the local authorities, 5 the personnel of the port, 5 the local chamber of commerce, 1 represents the dockers and 7 are designated by the minister in charge of ports. Each autonomous port has a "Directeur", appointed by a decree from the Council of Ministers. The director of the port authority has far reaching responsibilities. The Chairman of the Board is elected from its members.

With regard to the operational supervision of the Autonomous Port by the Government, the minister of sea ports appoints a government commissioner for each Autonomous Port. The Government Commissioner has to assure that (1) the operational decisions as well as the strategic orientations of the port authority are compatible with the interests of national port policy, the national economic policy, and the national environmental policy (2) the compliance of the operations of the board of directors with the laws and regulations. Besides a Government Commissioner, the minister of economy and finance appoints a financial controller. Both the Government Commissioner and the financial controller are invited to the board meetings. The Government Commissioner has a veto right.

For investments in infrastructure and superstructure (which do not substantially alter the infrastructure of the port) and the exploitation of activities for which no financial State support is foreseen, the board of directors is responsible to define the amounts of funds allocated to capital investment and exploitation. Furthermore, the board of directors sets maximum tariffs as well as the other conditions to use the infra- and suprastructures under its management. The Code des Ports Maritimes explicitly states that the board has to take the decisions necessary to allow the creation of financial revenue in order to cover the costs resulting from the activities under its own management.

The main income of the "Ports Autonomes" can be decomposed as follows:

- rents paid by private undertakings for the grant of the port areas and/or for the use of equipment owned by the Port Authority;

- port dues;
- State contributions;
- contributions of other public authorities (municipalities, regio's, Chambers of Commerce and Industry) under the form of prefinancing and under the condition of a repayment of the advance by annuities over a maximum of 20 years.

2.13.1.2.1.3 Financial management

The financial and economic policy of the Autonomous Ports is based on an annual budget, with a clear separation between the exploitation account and the capital investments account. Both budgets have to be approved in advance by the competent authority (for ports Autonomes), the State represented by the ministers of Sea ports and Economy and Finance). The budget, as well as the accounting of the port is subject to the laws and regulations of public accounting, as the port is considered as a "public undertaking with an industrial and commercial character". The general accounting principles for the ports (amortization rules, stock evaluation, analytical accounting principles) are set by a commonly approved plan, which all Ports Autonomes have to comply with and which has to be approved by the minister of sea ports and the minister of economy and finance, after advice of the national commission of accounting. An annual budget equilibrium is a prerequisite, however the Code states in the same article that the competent authority has the possibility to instantly create new resources. With regard to the treatment of annual surpluses at the end of the budget cycle, 50% of the surplus is transferred to the State after legal obligations in terms of provisions and reserves. Since 2003, no remuneration of the capital grants is requested.

The exploitation part of the budget consists of:

- Revenues:
 - Port dues;
 - Concession dues;
 - Dues for the rent of public equipment (e.g. cranes);
 - Taxes;
 - State contributions for maintenance of the maritime access (the programme as well as the overhead costs should be described in a separate annex);
 - Contributions of other public entities to the exploitation of the port (municipalities, regions, chambers of commerce and industry, etc.);
 - Other.
- Costs:
 - All the costs resulting from the administration, exploitation, maintenance, amortisation of infrastructure and equipment, interest on loans, provisions and all overhead costs.

The capital part consists of:

- Revenues:
 - o Amortisation;
 - o State funding;
 - o Selling or alienation of movable and unmovable assets;
 - o Interest on loans given by the port authority;
 - o Contributions of other public entities to capital investments of the port (municipalities, regions, chambers of commerce and industry, etc.);
 - o Other.
- Costs:
 - o All costs related to the renewal, reconstruction, renovation or extension of movable and unmovable assets as well as the refunding of borrowed capital by the port authority.

With regard to the financial management, a key function in the Autonomous Port is the “Account Agent” (“Agent Comptable”). He/she is responsible for the collection of all the revenues, and the execution of the payments, instructed by the director of the port. Furthermore, the Account Agent plays a key role in the provision of management information to the port’s management. The Account Agent is also appointed by the minister of Sea ports and the minister of Economy and Finance. The annual accounts of the port are controlled by the French Court of Auditors.

2.13.1.2.1.4 Investment policy for terminal-related infrastructure

With regard to new investments in infrastructure (docks, quays), simply defined as ‘works’ (‘travaux’) in the Code des Ports Maritimes, a project description has to be submitted to the minister with an advice of the Board of Directors. After the approval of the minister, the implementation procedure can be started with the consultation of several committees, the execution of an impact study as well as the consultation of the different stakeholders. If a full agreement can be reached in the committees and with the stakeholders, as well as with the different public authorities on the financing of the project, the project can be realized.

The development and exploitation of superstructure are either done by the port authority, or are characterized by a concession or a similar agreement with other public authorities or private companies. In the case of private companies, a so-called “obligation of public service” is closed.

The Code des Ports Maritimes also allows (since 1999) the closure of a “terminal exploitation agreement”. This agreement only refers to the management or the development of a specific terminal (e.g. for a specific traffic type), more specifically the investments to allow operations of mooring, unmooring, handling and storage of maritime goods. Only if a sufficient number of public suprastructures (or private suprastructures with an obligation of public service) remains provided to the port users, the port is entitled close such an agreement. A standard agreement exists, which forms part of the Code des Ports Maritimes. The agreement sets the cargo volume objectives for the terminal, as well as the sanctions if the cargo volumes are below the objectives of the agreement, and it must be approved by the minister of sea ports and the minister of the budget.

2.13.1.2.2 Non Autonomous Ports

2.13.1.2.2.1 Organisation and management

The management of Non Autonomous Ports is assured by a director ('directeur'), who is either a regional director of the public infrastructure department ('Directeur départemental de l'équipement') or the regional director from the services of the minister of sea ports. The director of the port needs to assure the management and exploitation of the port, in coordination with all local public services and organisations. According to his operational needs, he can organize meetings with the local representation of public services, with the local Chamber of Commerce and Industry, with superstructure concession holders, with port users and with professional organisations. Each year, the port director has to submit a report with the results (revenues and costs resulting from the development, maintenance and exploitation of the port) of the past year, as well as submit a budget for the following year.

Besides the director, two committees are important in a Non Autonomous Port.

On the one hand, the 'Port Council', which gives advice on matters influencing moral and physical persons, and more specifically the port users. The matters for which an advice is compulsory are:

- The delimitation of the port;
- The budget of the port;
- The tariffs and the conditions for the use of the superstructure, port dues;
- Conditions of concessions and new concessions;
- New constructions;
- Various codes of conduct.

The Port Council meets at least twice a year and is also responsible for the annual report of the port, including a description of the financial, economic, social, technical and administrative evolution. The Port Council is composed of the representatives of the concession holder(s), members of local and regional authorities, the Chamber of Commerce and Industry (if it is not the concession holder), port users (industrial firms, ship operators, port operators, agents, pilots, etc.), as well as members of the personnel of the different services assuring the exploitation of the port. The prefect of the department is member of the Port Council, as well as the port director, who acts as the secretary of the Port Council.

On the other hand, the Strategic Steering Committee gives an advice on the long-term development of the port, as well as the investment program of the port. This committee meets at least twice a year and is composed of three members representing the State, three members representing the local and regional authorities and three members representing the concession holder. The prefect of the department acts as president.

2.13.1.2.2.2 Investment policy for terminal related infrastructure

With regard to investments for construction, extension or modernisation ('works' or 'travaux' in the Code des Ports Maritimes) of the Non Autonomous Ports, the decision to launch the implementation procedure lies in the hands of the prefect, who is the highest public servant in a department (next administrative level after the region and the State). However, for

projects exceeding 15 million euros (value 1999) and in ports which are listed as the 'principal' ports, the minister has to decide. If the decision is positive, the project follows the same administrative procedure as for Autonomous Ports.

The development of public port superstructure, as well as the exploitation of the suprastructures, can be transferred by means of a concession to another public service or organisation, or a private organisation. If an investment by a private company is made for its own use, an 'obligation of public service' is compulsory.

2.13.1.2.3 Ports under the supervision of departments and municipalities

These ports fall under the responsibility of local or regional authorities. The legal framework is very similar to the non-autonomous ports. The difference with the non-autonomous ports is that they do not fall under the competence of the State but under the competence of local authorities, and that in general, they are of less economic importance than non-autonomous ports (which are considered of national interest).

2.13.1.3 Changes in the regulatory framework: transitional period 2004-2007

France has had a historical tradition of a strong centralized port and transport policy. The law of August 13th, 2004 changes this tradition to a large extent as a substantial number of infrastructures (regional airports, road networks, seaports, other infrastructures) are handed over by the State to local and regional authorities. The objective of the government is to bring the decision centre of the local and regional ports closer to the local and regional authorities. As a result, for seaports, this law is particularly relevant for the non autonomous ports, which are to be handed over to the local and regional authorities (or a group of authorities) on the geographical territory where they are located by January 1st, 2007. Special characteristics of the law are that different authorities can put themselves forward for the control and management of the total port or specific parts of a port. Should there be different candidates 6 months before the deadline, the State representative in the concerned region needs to supervise the negotiations between the candidates in order to have a single candidate, after which the transfer can be executed. If there are no candidates on January 1st, 2006, or alternatively, no agreement between candidates on the December 31st, 2006, the State representative will decide on the beneficiary of the ports (or the parts of a port). For each port, an agreement between the State and the beneficiary will be closed, including a description of the state of the port, as well as the specific conditions of the transfer. The beneficiary public authority (or group of public authorities) then follows the State in assuming all rights as well as liabilities against third parties. There is no payment by the beneficiary for the transferred infrastructure and/or superstructure.

As a result of the decentralisation law, only two generic types of seaports will be considered in the future:

- Autonomous ports, under the supervision of - and controlled by - the State;
- Ports under the supervision of - and controlled by - the local and regional authorities.

This law leads to a large degree of uncertainty, both on the political level, as on the level of Autonomous Ports as well as Non Autonomous Ports. On the political level, there is a discussion about the law in terms of the going concern of many of these ports, as their mission could be changed (e.g. a shift to property development instead of maritime traffic

objectives). In the large majority of non-autonomous ports, the Chamber of Commerce and Industry has been the only concession holder with a quasi-monopoly with regard to the management and exploitation of the Non Autonomous Ports. With the transfer of these ports to local and regional authorities, concessions will need to be renewed during the course of 2006, leading to a large degree of uncertainty, as it is not sure that the Chambers of Commerce and Industry will be able to retain their existing concession⁷⁷. The beneficiary of the transfer will decide on the model of organisation as well as the conditions of concession. Of course, the law on public tendering as well as the Code Maritime will need to be respected.

The Autonomous Ports, from their side, often criticise a perceived lack of accounting transparency with regard to the public financing and the management of the Non Autonomous Ports. In reality, many Autonomous and Non Autonomous Ports (especially those considered of national interest) compete for the same market as they are both of national and even international interest, an example is the Autonomous Port of Dunkirk (Dunkerque), which competes with Calais and Boulogne-Sur-Mer, which are both Non Autonomous Ports run by their respective local Chambers of Commerce and Industry. Other examples include the Autonomous Port of Marseilles, which competes with the Non Autonomous Port of Nice, as well as the French ports of Sète and Toulon for several activities of the business portfolio. Although it is very difficult to prove that competition is distorted, the existence of two distinct types of ports has led and continues to lead to uncertainty as well as a low degree of confidence of the ports vis-à-vis other ports and the authorities (local, regional as well as the State). As a result, the development of a national port policy is very difficult. National maritime and sea port policy is prepared by the Ministry of Transport, General Direction of Sea and Transport, which has a separate Direction of maritime, road and inland waterway transport. There also exists a National Commission for Seaports ("Conseil national des communautés portuaires") where the national policy and international issues are to be discussed in order to enhance the competitiveness of the French port sector.

At this moment, the interviews with port representatives, as well as reports from discussions and interpellations in the French Parliament, indicate that the transition process will be difficult, and that the ambition of the State to finish the transfer operations by January 2007 will be difficult to achieve. Some respondents even indicated that the law could be changed again in the future if implementation would not succeed. Finally, the respondents of the autonomous ports stressed the need for more legal uniformity as well as the same accounting transparency for all ports, in order to create a level playing field for all ports on the French territory.

⁷⁷ For example, the Chamber of Commerce and Industry of the port of Calais has been the legal concession holder of the port facilities since 1925. The port of Calais is considered of national importance with more than 13 million passengers and almost 38 million tons of cargo volume in 2004. The turnover reached 227 million euros in 2004.

2.13.2 Work package I: Public financing of seaports

2.13.2.1 Task I-a: Identification of systems for public financing in France

2.13.2.1.1 Access infrastructures

2.13.2.1.1.1 Maritime access routes, sea locks and nautical services

As far as investments in maritime access routes are concerned, the situation can be summarised as follows:

- In Ports Autonomes: access channels, exteriors breakwaters, sea locks and other infrastructures located outside the port area: 80% borne by the State and 20% borne by the Port Authority⁷⁸. The maintenance costs for access channels, exteriors breakwaters, sea locks and other infrastructures located outside the port area, personnel cost included, are borne by the State for 100%⁷⁹;
- In Ports of national interest: access channels, exteriors breakwaters, sea locks and other infrastructures located outside the port area: 30% to 50% borne by the State.

The general situation of nautical services can be summarised as follows:

- **Pilotage:** in each French port pilotage services are carried out by a “station de pilotage”. The latter is a private organisation on co-operative basis but under public control. Pilotage is mandatory for the biggest ships, beside some exceptions defined for each port by decree of the local governmental authority (Prefect). The related tariffs are fixed after consultation of the various port users and operators. It is useful to note that many complaints are lodged by ship owners and port users about the cost and the general condition of pilotage service;
- **Towage:** service is carried out by private operator on concession. As a general rule, towage is not a compulsory service, being the master's responsibility to use it or not. It can become compulsory by a decision of the Maritime Authorities for safety reasons. The service tariffs are fixed by decree of the prefect. Many complaints are lodged by ship owners and port users about the cost and the general condition of this service;

⁷⁸ Art. L. 111-5 of the Code des Ports Maritimes:

"L'Etat participe dans la proportion de 80 % aux dépenses résultant des opérations de modernisation suivantes:

- creusement des bassins;
- création et extension des chenaux d'accès maritimes et des plans d'eau des avant-ports;
- construction et extension d'ouvrages de protection contre la mer et d'écluses d'accès, ainsi que renouvellement de ces deux dernières catégories d'ouvrages.

En outre, l'Etat rembourse 60 % des sommes versées pour le service des emprunts émis pour faire face aux opérations de même nature engagées antérieurement à la création du port autonome et que celui-ci contracte ou prend en charge en application de l'article L. 111-10".

⁷⁹ Art. L. 111-4 of the Code des Ports Maritimes:

"L'Etat supporte les frais de l'entretien et de l'exploitation des écluses d'accès, de l'entretien des chenaux d'accès maritimes, de la profondeur des avant-ports, des ouvrages de protection contre la mer. Il supporte, dans les mêmes conditions, pour l'exécution de ces travaux, les dépenses relatives aux engins de dragage dont le régime de propriété et les conditions d'exploitation sont fixés par décret en Conseil d'Etat.

Le programme et le montant des dépenses de ces opérations sont arrêtés chaque année par décision de l'autorité compétente".

- **Mooring:** private companies acting under concession carry out these services. In principle, no exclusive rights are given. There is no mandatory character of the services.

2.13.2.1.1.2 Landside access (road, rail, inland waterways)

In general, landside access to the port is financed by other public authorities (State or regions, or other infrastructure managers under State control, e.g. Réseau Ferré de France or Voies Navigables de France). Depending on the importance of the road, rail or inland navigation infrastructure (local, regional, national), the finance structure will be determined.

2.13.2.1.2 Terminal related infrastructure

As far as investments in terminal related infrastructure are concerned, the situation can be summarised as follows:

In Ports Autonomes :

- Docks, quays and jetties: 60% borne by the State and 40% by the Port Authority⁸⁰;
- Infrastructures of specialised terminals: they are entirely financed by the Autonomous Ports, but the State can contribute up to 60%;

In Ports of national interest:

- Docks, quays and jetties: 30% to 50% borne by the State;

It must be emphasised that these are only principles. The State usually finances much less than the maximum financial part it could finance (due to credit restrictions). All investments are considered on a case-by-case basis and financial participations are always negotiated. This is also valid for other terminal-related infrastructure such as rail and inland navigation facilities on the terminal.

2.13.2.1.2.1 Suprastructures

As far as investments in superstructures are concerned, the situation can be summarised as follows:

- In Ports Autonomes: superstructures (sheds, warehouses and cranes): entirely financed by the Port Authority. They can be directly operated by the Port Authority or leased to firms engaged in handling cargo. However, recent developments of new container handling facilities show a bigger involvement of the private sector, as paving, cranes and buildings are entirely financed by the private sector;
- In Ports of national interest: superstructures: entirely financed by the Port Authority.

⁸⁰ Art. L. 111-6 of the Code des Ports Maritimes:

"Les charges des travaux de création, d'extension ou de renouvellement des ouvrages d'infrastructure et engins de radoub autres que ceux visés à l'article L. 111-5 sont couvertes dans la proportion de 60 % par des participations de l'Etat.

En outre, l'Etat rembourse 20 % des sommes versées pour le service des emprunts émis pour faire face aux opérations de même nature engagées antérieurement à la création du port autonome et que celui-ci contracte ou prend en charge en application de l'article L. 111-10".

2.13.2.2 Task I-b: Public financing in the ports of Le Havre and Marseille in 2003

2.13.2.2.1 Introduction

In this section, the public financing of two Autonomous Ports will be analysed. On the one hand, the Port of Le Havre, situated in the North-Eastern part of the country and making part of the Hamburg – Le Havre range. On the other hand, the Port of Marseilles, situated in the South-Eastern part at the Mediterranean sea and competing with other Mediterranean ports. For each port, a description of the port will be provided, as well as the amounts of public financing in 2003 or 2004. Furthermore, a case-study of a large port development project will be described for both ports, respectively Port 2000 in Le Havre and FOS2XL in Marseilles. As explained in section 1, both ports have to comply to the Code des Ports Maritimes, which also arranges the public financing by the State.

In this report, the resulting flows for 2003 are described. A methodological problem with this approach is the description of flows resulting from the building of new port capacity, for which public funding was granted. In most cases, these projects take several years before they are in use. In the years just before the actual activity starts and the building costs are the highest, public funding can seem extremely high in comparison with other ports (which don't have an important project to build). Therefore, we opt for a case-study approach, describing the projects as a whole, in order to gain a global insight into the financing structure of relevant and representative port development projects.

The information sources used for the analysis of the Ports of Le Havre and Marseilles are:

- Interviews with port representatives: during the months of June and July, a meeting was organized at the port authorities offices between the research team and several port representatives. Typically the head of the financial department, as well as various senior member of staff of other port services (e.g. Strategy and Development, European affairs, Legal Affairs) were present.
- Annual reports of the ports;
- Internal documents of the ports;
- Documents and information on the port's websites;
- Former studies and research;
- Articles from the specialized press, e.g. Lloyd's List.

2.13.2.2.2 The port of Le Havre

2.13.2.2.2.1 Main characteristics and governance structure

2.13.2.2.2.1.1 Definition of the port area and infrastructures

The port area is delimited by the Code des Ports Maritimes. Actually, the port area extends itself to 27 kilometres east to west and 5 kilometres north to south. The port area (approx.

5.000 hectare) includes a complex of facilities for maritime cargo handling, as well as an accompanying port logistics and industrial complex.

The port has infra- and suprastructures to handle all types of traffic:

- Liquid bulk (oil products) are handled at the port of Le Havre (about 60%) and at Antifer (about 40%), a terminal capable of handling the biggest tankers (550.000 dwt) in the world;
- For containers, the port offered 27 gantry cranes along approx. 5km of quays at the end of 2004. The number of cranes and the quay length will be increased at the beginning of 2006 due to the inauguration of the first phase of the Port 2000 project and further renewal of terminal equipment on the existing quays;
- For dry bulk (minerals, cereals, coal, etc.), the port can handle the capesize ships up to 170.000 dwt.
- For ro-ro traffic, the port offers quays for the handling of new cars, as well as lorries, trailers and containers through ferry technology.
- The port also has the capacity to handle all kinds of general cargo (fruit and other fresh produce) as well as project cargo.

2.13.2.2.1.2 Types of commodities and traffic evolution

In 2003, the port handled 71,5 million tons. Table 2-96 shows the traffic evolution between 2002 and 2004.

Table 2-96: Traffic evolution in the port of Le Havre (2002 -2004) – tonnes

	2004	2003	2002
Liquid bulk	47.783.776	44.612.282	41.989.638
Dry Bulk	4.373.641	4.852.010	5.607.909
Containers	21.560.387	19.133.686	16.821.713
Ro-ro	2.414.007	2.804.516	3.178.003
Conventional cargo	43.452	90.148	100.564
Total	76.175.363	71.492.642	67.697.827

Source: Port of Le Havre (2005)

2.13.2.2.1.3 Governance structure

The port of Le Havre is managed by an Autonomous Port. An Autonomous Port is owned by the State, and acts like a public entity with separate legal personality and financial autonomy. The Autonomous Port is supervised by the Minister of Sea Ports and the Minister of Economy and Finance. Inside the port area, the Autonomous Port is responsible for:

- construction, renovation and renewal of the port's infrastructure and superstructure;
- exploitation and maintenance of the equipment;
- police inside the port area and its dependencies (channels, docks, etc.);

- management of its real estate;
- the development of industrial port zones.

The Autonomous Port is financed by port dues (on ships, cargo and passengers), charges for the use of equipments (rent of warehouses, cranes, sheds, etc.), concession dues.

The costs of maritime access (exploitation and maintenance) are financed by the State. In general, large investment projects are financed in collaboration with other public authorities, the State, and private operators.

The governance structure of the port is organised following the Code des Port Maritimes and consists of:

- A board of directors, consisting of members of local communities and local public authorities (e.g. Chamber of Commerce and Industry, representatives from the Region), members of the personnel, members representing the State, members representing the port users, and experts from the port and maritime world. Furthermore, a Government Commissioner and a State Auditor (financial controller) are represented.
- A port director (or general manager – “directeur général”), appointed by the Board of Directors and approved by the minister. The port director is also a member of the board of directors, but has no voting rights.

The port director sets up a management committee, which in the case of the Port of Le Havre consists of the commercial manager, the development manager, the equipment manager, the technical manager, the exploitation manager, the financial manager (“Account Agent”, see supra) and a general secretary (HR, Communication, Legal, etc.).

2.13.2.2.2.2 Investment, exploitation and maintenance responsibilities

2.13.2.2.2.2.1 General division of services and responsibilities between the Autonomous Port, private firms and other administrations and public authorities.

Table 2-97 shows the general division of services and responsibilities in the port area of Le Havre.

Table 2-97: General division of services and responsibilities

	Autonomous Port	Private sector	Other public entities
Services for ship operators			
Allocation of ships to quays	X		
Navigational control	X		
Pilotage		X	
Towage		X	
Mooring		X	
Ship repair		X	
Water supply			X (City)
Collecting of port dues			X (Customs)

Security control			X (Maritime affairs)
Fire brigade			X (City)
Services for cargo			
Handling		X	
Warehousing		X	
Customs control			X (Customs)
Health control			X
Hinterland transport		X	
Tracking of dangerous goods	X		
Common IT platform		X	
Infrastructure/Superstructure			
Dredging	X		
Maintenance of quays and sites	X		
Management of equipment	X		
Management/maintenance of bridges and locks	X		
Exploitation and maintenance of	X		
Studies and construction of new infrastructure	X		

Source: Port Handbook of Le Havre

Table 2-97 shows a general overview, but has to be interpreted with care. With regard to nautical services (such as towage), it consists of private companies which are given exclusive rights (see *supra*). Nevertheless, there seems to be an evolution to more competition, as for example for towage, it is very likely that a second firm will start providing towage services in the Port of Le Havre (De Lloyd, 2005).

2.13.2.2.2.2 Flows from the State and other public authorities to the port

As was mentioned before, the Autonomous Ports are public entities and have to comply with the public accounting rules. The annual report of the port contains the results of the port activities and a perspective on port development and investment projects. Financial data are not provided in public documents such as annual activity reports, nor in a public document explaining the variation in financial flows. The information regarding the flows between the public purse and the Port of Le Havre is taken from internal documents, provided by the Port Authority, available data on the port website, and the information obtained during the interviews with port representatives.

For the flows, a distinction will be made between exploitation subsidies and investment subsidies.

With regard to **exploitation** subsidies, the internal documents of the port show that for 2003, 8,2 million euros were received as exploitation subsidies (7,9 million euros in 2002). These exploitation subsidies are used for the tasks which the port authority provides on behalf of the State and concern the maintenance of the maritime access (breakwater, access channels, sea locks, etc.), as is stated by the Code des Ports Maritimes. However, put in historical perspective and taking into account the lack of State budget for the sea ports,

members of the Port Authority have calculated that for the Port of Le Havre, a historical passive of approx. 102 million euros has been created due to structural under-financing (real costs versus amounts received by the State).

With regard to **investment** subsidies, though fixed percentages exist according to the Code des Ports Maritimes, separate agreements are closed per specific project for the renewal of equipment and/or the development of port infrastructure. In the financial overview for 2003, the port provides a detailed overview of the investments for the financial year 2003, as well as the historical evolution from 1999.

Table 2-98 shows the evolution of the investments between 1999 and 2003, with the division between the State and the Port Authority.

Table 2-98: Evolution of investments in the Port of Le Havre 1999-2003 (million euros and %)

Year	Port Authority	State and other public authorities	Total
1999	22,8 (86%)	3,8 (14%)	26,6
2000	24,9 (80%)	6,2 (20%)	31,1
2001	46,9 (62%)	29,3 (38%)	76,2
2002	65,4 (49%)	66,8 (51%)	132,2
2003	151 (65%)	82,1 (35%)	233,1
Average	62,2 (62%)	37,6 (38%)	99,8

Source: Port of Le Havre (2003) and own calculations

Table 2-99 shows the detailed composition of the types of investments made during 2003.

Table 2-99: Composition of the investments during 2003

Type	Amount (in million euros)
"Centre roulier" (ro-ro berth)	3,5
Port 2000	201,8
Works for container sites	4,8
Security investments in equipment	10,4
Sites, buildings, roads	0,6
Works for logistics	1,5
Security investments for the headquarters	1,6
Electricity	0,3
Infrastructure	0,2
ICT	0,7
"Tancarville"	0,9
"Multivrac centre" (handling of dry bulk)	3,4
Ship repair	0,8
Other	2,6

Source: Port of Le Havre

The substantial increase in investments is due to:

- The renewal of port equipment, which is part of an investment plan 2001-2007, agreed upon with the State, and worth approx. 200 million euros;
- The Port 2000 project.

With regard to the renewal of port equipment in the 2001/2007 schedule, an investment program of 200 million euros has been set up in 2000 as most of the 21 container gantries in the port had reached their maximum age (the most recent was 10 years old, most of them 20 to 30 years old), and developments in container handling technology keep pushing operators to re-engineering. Furthermore, reforms of cargo handling in the French ports in the 1990s led to underinvestment so that equipment was not modernized and terminals were not re-engineered. During the period 2000-2004, 12 new container gantries, 2 bulk gantries as well as two mobile cranes went into service, for a total investment amount of 100 million euros. Old gantries were either withdrawn and replaced or repositioned in order to gain productivity. The investments will continue in 2005 with 3 new gantries inside the existing port as well as 8 new gantries being put into service on the Port 2000 terminals.

One of the main characteristics of the investment program is an increase of the involvement of the private sector in the investments in port superstructure: 9 out of 12 new container gantries are owned by the private sector. This will also be the policy in the future as the port plans to withdraw itself from investments as well as exploitation of superstructures and act like a landlord port (such as Antwerp, Rotterdam, etc.), providing the infrastructure as well as auxiliary services of public interest.

Furthermore, investments forming part of this 2001/2007 program are:

- Extension and re-engineering of the ro-ro centre ("centre roulier");
- The development of logistics platforms and their transport connections;
- Modernisation of ship repair facilities;
- Renewal and re-engineering of the equipment fleet;
- Investments in the dry bulk and combination bulk centres.

Furthermore, the Port 2000 project will be realized during this period.

With regard to financing, the port finances this program by:

- Own means;
- Subsidies from the State, although it is not clear whether and to which extent the State participates in the renewal programme, for Port 2000 the State contributes 160,1 million euros as well as 37,8 million euros in hinterland connections;
- Loans from the European Investment Bank as well as commercial banks.

The flows from the State are known as they make part of the internal financial report. Furthermore, loans from "Société Générale", "Dexia Crédit Local" and other local banks were obtained in 2004 for an amount of 248 million euro, of which 140 million euros is an indirect loan from the European Investment Bank. No information was found on the State guaranteeing repayment of these loans if the Port Authority should fail to pay back.

Adding the 433,6 millions that the Port Authority invests itself in the Port 2000 project, this leads to a total investment of 633,6 millions in the period 2001/2007, to be financed by loans (see supra), State and regional authorities' subventions as well as own resources. However, the total amount of investments for which the Port Authority is responsible as principal, is higher as if only the Port 2000 project is considered, the Port Authority executes 693 million euros of investments.

In the section 3.13.2.2.2.3, we will describe and analyse the financing of the Port 2000 project.

2.13.2.2.2.3 Flows from the port to the State and other public entities

Following flows flow back to the State and other public entities:

- Each year, 50% of the net results (after reserves and provision) of the port has to be paid as a dividend to the State. For 2002 and 2003, respectively 3,3 and 2,7 million euros were paid as a dividend.
- In the financial statement, 'taxes' were paid in 2002 and 2003 for an amount of 1,5 million euros. These taxes are paid to organisms supplying professional education, consist of transport taxes as well as taxes to local public authorities (e.g. real estate tax on grounds).
- Payback of loans and of interest on loans (although not specifically mentioned that it concerns State loans). In the financial statements for 2002 and 2003 regarding the use of resources, respectively 3 and 4 million euros were paid back.

2.13.2.2.2.4 General financing structure

In general, three flows have to be considered as financial resources for investment, maintenance and exploitation:

- Port dues and port charges. Besides port dues related to maritime traffic, charges are levied on the concession and use of the port superstructure owned and operated by the Port Authority (such as cranes, warehouses, etc.), and the leasing of sites.
- Subsidies from the State and other public entities, for exploitation as well as investment.
- Capital loans provided by:
 - o The European Investment Bank;
 - o The State;
 - o Commercial banks.

2.13.2.2.2.3 Case study: The "Port 2000" project in the port of Le Havre

Port 2000 is an extension to Le Havre port's facilities for container traffic. It is intended to increase capacity and attractiveness to accompany the sustained growth of external trade. Numerous jobs and significant economic consequences are expected to be generated by the project in logistics and transport, but also, locally, in port trades, shops and services. This phased project will double container trade through the port by 2010. It is designed to foster

the use of the most competitive and least polluting means of hinterland connection. The project was studied for about 6 years, including a public enquiry during winter 1997- spring 1998. Finally, the construction works started in the autumn of 2001 and the first phase will be finished in May 2005, when 6 berths will be available. Other berths will be constructed according to traffic growth.

The Port 2000 project consists of the following investments:

- The construction of a second port entrance, including dredging, construction of interior breakwaters (3,2 km) and exterior breakwaters (5,8 km), environmental facilities;
- The construction of new quays with a total length of 4.200 meters, with sufficient space for warehousing and future developments. The first phase consists of 1.602 meters, of which 1.400 can be effectively used;
- The construction of 6 new berths. All 6 berths can be used by the largest containerships. The loading/unloading capacity is estimated at 3 to 4 million TEU per year.
- The construction of infrastructure for hinterland transport, especially railway and roads. For both transport modes the transshipment facilities are built in the immediate surroundings of the deepsea infrastructure, in order to reduce the number of movements in the port area.

As was mentioned before, related with the Port 2000 project there exists a parallel investment project 2001/2007, initially in order to do some interim investments (Working Group 2000-2003), later extended to modernize the port equipment and superstructure as a whole. In the 2000-2003 period, this parallel investment project consisted mainly of:

- The construction of 30 ha new port area;
- Improvement of equipment;
- 12 new super-post-panamax gantry cranes (see supra);
- Lengthening of the Quai des Amériques.

Both the investment programs (Port 2000 and the Working Group 2000-2003 project) were estimated at 733 million €, of which 630 million € is for the Port 2000 project. New information available on the cost of the first phase of the Port 2000 project is provided in Table 2-100.

Table 2-100: Finance structure of the Port 2000 project (in million euros) (italic = public finance)

Financing party	<i>Maritime access / port infrastructure</i>	<i>Environment</i>	<i>Hinterland access</i>	Superstructures	Total
TEN (EU)	<i>2,50</i>		<i>2,21</i>		4,71
ERDF (EU)	<i>33,10</i>	<i>5,00</i>	<i>4,02</i>		42,12
Region	<i>19,44</i>	<i>9,91</i>	<i>23,20</i>		52,55
Department	<i>19,44</i>	<i>9,91</i>	<i>20,20</i>		49,55
RFF- SNCF*			<i>13,70</i>		13,70
State	<i>160,10</i>		<i>37,82</i>		197,20
Port Authority	<i>433,60</i>				433,60
Operators				275,00	275,00
Sub-total	<i>647,27</i>	<i>45,73</i>	<i>101,15</i>	275,00	1069,15
Total	<i>693,00</i>		<i>101,15**</i>	275,00	1069,15

* RFF = Réseau Ferré de France: French rail infrastructure manager. SNCF = French national railway operator

** Of which rail takes 92 million euros, roads 9,15 million euros.

Source: internal documents provided by the Port Authority

The following organisations/parties are financially responsible for the investments of the Port 2000 project:

- The European Commission has granted approx. 47 million euros as a subsidy. This is because Le Havre is located in an area for regional development and has the possibility to claim subsidies from the TEN-programme and the Feder-Funds (regional development). Moreover, the Port 2000 project can claim subsidies within the framework of the LIFE Environment programs.
- The European Investment Bank will grant a loan of 140 million € to the Port 2000 project.
- The State (French Government) will subsidise the project for 160,10 million €, under the form of a lump-sum subsidy of 91,47 million euros. In addition the Port Authority will receive a capital subsidy of 68,6 million €, with repayment conditions at an interest rate of 3,5%.
- The Préfecture de la région Haute Normandie et du département de la Seine Maritime both invest in the Port 2000 project: the Region will invest 52,55 million euros, the Department will invest 49,55 million euros.
- The French railway infrastructure manager, together with the national operator, will invest 13,7 million euros.
- The private sector will invest 275 million euros.

As a result, the following conclusions can be drawn:

- In the total budget, the public sector (Port Authority, State, Regions, EU, ...) contributes 74%, the private sector 26%.

- In the budget of the public sector, the Port Authority provides 55% (including hinterland access in the public budget), 63% (if the hinterland access budget is excluded).
- Including the hinterland access in the public budget, the State provides 25%, the Regional authorities 13%, the EU 6% and RFF/SNCF 2%.

With regard to the financial impact and recuperation of investment costs, the compulsory impact study (including a cost-benefit analysis) executed in 1999 stated that⁸¹:

- For the public financing resources provided by the State and other public entities, the flow-back is the incremental taxes that will be collected due to a higher level of economic activity. Each TEU would contribute 443 FF (or approx. 67,5 euro per additional TEU) in 2005 to the economic system, on which a certain percentage of taxes will flow back to the State and other public authorities. However, no estimation of the additional taxes was made. Of the 443 FF per TEU, 113 FF (or approx. 17,2 euro) would be a benefit for the Port Authority.
- For the Port Authority, a financial assessment was made, based on a twenty-year period and an expected price-inflation of 1% per year. Furthermore, the port would change its tariff structure favouring the development of the container trade by abolishing the port dues on the cargo volume, but increasing the port dues on the ship by means of transfer. For oil products, the policy would be to gradually decrease the port dues on the cargo volume in order to consolidate the presence of refineries in the Seine valley and attract new activities. The changes in the tariff structure are under the condition of a financial equilibrium of the Port Authority. As a general cost of borrowing, a fixed interest rate of 5,5% was taken. The results of the analysis showed that the Internal Rate of Return (IRR) if the realisation of the project was compared to a business as usual case (no realization of Port 2000) was 4,9% in a low growth case and 8,2% in a high growth case, thus close to or higher than the interest rates. The Port Authority would make net profits again from 2007 on in the high growth case and from 2012 in the low growth case.

2.13.2.2.3 The port of Marseilles

2.13.2.2.3.1 Main characteristics and governance structure

2.13.2.2.3.1.1 Definition of the port area and infrastructures

The port of Marseilles is a multipurpose port offering handling facilities for containers, general cargo, ro-ro as well as liquid and dry bulk traffics. The port consists of two distinct port areas:

⁸¹ These findings are based on the hypotheses of the impact study executed in 1999. Several hypotheses and the description of the project are somewhat different from the first phase as described earlier in this report. The initial impact study started from a project of 4 berths in a first phase, instead of 6 berths. The financial structure was also different as the Port Authority would invest 1.435 millions of FF (approx. 220 million euros) and other public authorities 1.150 millions of FF (approx. 175 million euros). As a consequence, the results and the data provided in this report concerning financial impact are only indicative. In 2002, a second study was made for berths 5 to 10.

- The eastern port area, consisting of 8 docks with draughts between 6 and 14 metres. This port area is situated near the historical old port and the city of Marseilles. It comprises:
 - o 91 berths, representing 13 km of quay, 40 rail mounted cranes, 9 self-propelled cranes and 3 container gantry cranes.
 - o A storage area of 400 000 m² of sheds (including warehouses), and 700 000 m² of storage yards.
 - o Passenger terminals.
 - o Ship repair facilities, representing 10 engraving docks and 25 cranes.
- The western port area, located some 60 km to the West of the city of Marseilles, and consisting of 10 000 hectares of port and industrial land. The port infrastructures consist of:
 - o Oil terminals for crude oil as well as refined products;
 - o LPG and chemical terminals;
 - o Container terminals;
 - o Public ore terminals;
 - o Ro-ro terminals for new cars;
 - o Various private berths on the land of industrial companies.

Historically, the port was located near the city. However, the pressure of the city as well as the growing scale of port activities necessitates the development of Fos. Today, most of the activity and traffic are situated at Fos, representing about 90% of the cargo traffic.

2.13.2.2.3.1.2 Type of commodities and traffic evolution

In 2003, the port handled 95,5 million tons. Table 2-101 shows the traffic evolution between 2002 and 2004.

Table 2-101: Traffic evolution in the port of Marseilles (2002 -2004) – tonnes and TEU

	2004	2003	2002
Liquid bulk	63.153.000	65.845.000	64.148.000
Dry Bulk	14.396.000	14.976.000	13.556.000
Containers (TEU)*	916.000	833.000	809.000
Conventional cargo (incl. ro-ro)	7.022.000	6.827.000	6.817.000
Total (tonnes)	94.093.000	95.544.000	92.261.000

* Tonnes can be calculated using the average weight of a container in 2003 and 2002 (9,65 tonnes per TEU), and the number of containers. Exact figures in tonnes were not available
Source: Flemish Port Commission, Port of Marseilles (2004, 2005) and own calculations

Furthermore, 1.861.000 passengers transited through the port during 2004.

2.13.2.2.3.1.3 Governance structure

The port of Marseilles is managed by an Autonomous Port. An Autonomous Port is owned by the State, and acts like a particular public entity which gathers public duties as well as industrial and commercial activities which are legally defined by the Code of Ports. This particular public entity has separate legal personality and financial autonomy. The Autonomous Port is supervised by the Minister of Sea Ports and the Minister of Economy and Finance. Inside the port area, consisting of areas in Marseilles, Lavéra, Caronte, Fos and Port Saint-Louis sur Rhône, the Autonomous Port is responsible for:

- construction, renovation and renewal of the port's infrastructure and superstructure;
- exploitation and maintenance of the equipment;
- police inside the port area and its dependencies (channels, docks, etc.);
- management of its real estate;
- the development of industrial port zones.

The Autonomous Port is financed by port dues (on ships, cargo and passengers), charges for the use of equipments (rent of warehouses, cranes, sheds, etc.), concession dues and the provision of services.

The costs of maritime access (exploitation and maintenance) are financed by the State. In general, large investment projects are financed in collaboration with other public authorities, the State, and private operators. As a general rule, the Port Authority prepares the sites and provides connections of power supplies, utilities, roads, railways and canals to the sites of the port user.

The governance structure of the port is organised following the Code des Port Maritimes and consists of:

- A board of directors, consisting of members of local communities and local public authorities (e.g. Chamber of Commerce and Industry, representatives from the Region), members of the personnel, members representing the State, members representing the port users, and experts from the port and maritime world. Furthermore, a Government Commissioner and two State Auditors are represented, but do not have voting rights.
- A port director (or general manager – “directeur général”), appointed by the Board of Directors and approved by the minister, who executes the decisions of the board of directors. The port director is also a member of the board of directors, but has no voting rights.

The port director sets up a management committee, which in the case of the Port of Marseilles consists of the port director assisted by three associate port directors. Furthermore, the organisational structure reporting to the management committee is split into “operational services” led by a manager, as well as “corporate services”, also led by a manager.

The operational services are split up in:

- General services (including ICT, telecom, legal, logistics);
- Operations and terminals in Marseilles (eastern harbour);
- Operations and cargo terminals in Fos (western harbour);
- Operations and oil terminals in Fos (western harbour).

The corporate services are split up in:

- Commercial management and international and EU relations;
- Strategy and resources (including Strategy and development, HR, Sourcing, Financial controlling);
- The services of the Public Accountant (or Account Agent);
- The harbour master's services;
- Environmental services;
- Engineering and research & development.

2.13.2.2.3.2 Investment, exploitation and maintenance responsibilities

2.13.2.2.3.2.1 Flows from the State and other public authorities to the port

As was mentioned before, the Autonomous Ports are public entities and have to comply with the public accounting rules. In general, the annual report of the port contains the results of the port activities (cargo traffic evolution) and a perspective on port development and investment projects. In the case of the Port of Marseilles, financial data under the form of the profit and loss account, a balance sheet as well as the type and amounts of investment are also provided in public documents such as annual activity reports. Furthermore, the variations in financial parameters are explained, as well as the amount of public funding received. Furthermore, a separate document is published ("Financial panorama"), which provides the financial evolution in a 5-year perspective as well as supplementary financial information on the cost and revenue structure. This document was transmitted to the research team during the interview with port representatives.

For the flows, a distinction will be made between exploitation subsidies and investment subsidies.

With regard to **exploitation** subsidies, the "Financial panorama" of the port shows that for 2003, 1,238 million euros were received as exploitation subsidies (1,164 million euros in 2002). These exploitation subsidies are used for the tasks which the port authority provides on behalf of the State and concern the maintenance of the maritime access (breakwater, access channels, sea locks, etc.), as is stated by the Code des Ports Maritimes. In the case of the Port of Marseilles, these costs are relatively low due to the port's location in the Mediterranean Sea, which does not suffer from heavy tides such as Atlantic, North Sea and river ports such as Le Havre, Zeebrugge or Antwerp. As a result, costs of maintenance dredging are non-existent. In the case of the Port of Marseilles, it concerns the maintenance of the breakwaters and the bridges. Port representatives stated that the exploitation subsidy received by the State for these tasks historically covers approx. 1/3 of the total cost.

With regard to **investment** subsidies, although fixed percentages exist according to the Code des Ports Maritimes, separate agreements are closed per specific project for the renewal of equipment and/or the development of port infrastructure. In general, the percentages of State finance tend to be lower than announced in the Code des Ports Maritimes. As a result, other resources have to be employed such as aids of regional and local authorities, ERDF funds and bank loans. In the annual report for 2003, the port provides in its table of the “use of resources” a detailed overview of the investments for the financial year 2003, split up according to the financing party. It has to be mentioned that the port has started an ambitious investment plan since 1998, which will continue in the period of 2004-2009 (539 millions of euros for investment planned)

With regard to capital employed for works and acquisitions, 57,9 million euros were employed in 2002, 76,9 million euros were employed in 2003. Table 2-102 shows the division between the State and the Port for works and acquisition:

Table 2-102: Capital employed for works and acquisitions (million euros)

Type	2002	2003	2004
Inland Waterways (100% State)	0,2	0,2	N/A
Financed by the State for 80%	2,1	19,5	N/A
Financed by the State for 60%	5,3	6,4	N/A
Financed by the Port Authority	50,3	50,8	N/A
Total	57,9	76,9	66,1

Source: Port of Marseilles (2003, 2005)

Table 2-103 shows the types of the investments in 2002, 2003 and 2004.

Table 2-103: Types of investments 2002-2004 (million euros)

Type	2002	2003	2004
Developments	10,3	10,6	7,1
General cargo Marseilles	11,9	11,7	9,5
General cargo Fos and Distriport	10	30,1	13,3
Crude oil and oil products	3,1	9,2	11,6
Ship repair	3,9	1,5	1,8
Industrial zone	0,3	1,2	4,9
Passengers Cruises Euromed	11,9	6,2	10,9
Miscellaneous/Inland Waterways	6,5	6,5	7,7
Total	57,9	76,9	66,9

Source: Port of Marseilles (2003, 2005) and own calculations.

For 2003 and 2004, the sources of finance for these investments are shown in Table 2-104.

Table 2-104: Sources of finance of the investments for 2003 and 2004 (million euros, %)

Source	2003	2004
State	13,2 (17,2%)	4,2 (6,2%)
European funding	13,5 (17,6%)	2,6 (3,9%)
Others*	16,4 (21,3%)	20,8 (31,0%)
Self financing of the port	33,8 (43,9%)	39,4 (58,9%)
Total	76,9 (100,0%)	66,9 (100,0%)

* Presumably, this involves among others financing from other public authorities, such as regions, department, etc. However, this is not explicitly mentioned in the documents.

Source: Port of Marseilles (2005) and own calculations

Financing by bank loans was 8 million euros in 2004, and 6 million euros in 2003.

2.13.2.2.3.2.2 Flows from the port to the State and other public entities

Following flows flow back to the State and other public entities:

- Each year, 50% of the net results of the port has to be paid as a dividend to the State.. The net results according to the profit and loss account were 1,4 million euros in 2002 and 5,7 million euros in 2004, but no dividend was paid. The reason is that from a legal point of view, and similar to the legislation for private companies, no dividends can be paid if the transferred results of previous years are negative. As this is not the case at the moment, no dividend can be found, although there is a net result. The reason for this situation are the large investments during the second half of the 1980s when the terminals at Fos were constructed, and the port created large debts (with according charges). The Port Authority hopes to be able to pay a dividend in the near future.
- In the financial statement, 'taxes' were paid in 2002 and 2003 for an amount of respectively 1,3 and 1,4 million euros. It mainly concerns social taxes.
- Payback of loans and of interest on loans (although not specifically mentioned that it concerns State loans). In the financial statements for 2002 and 2003 regarding the use of resources, respectively 6,4 and 6,3 million euros were paid back on loans. In the cost structure, we have found remuneration of grants ("rémunération de dotation"⁸²): 1,3 million in 2002 and 1,2 million in 2003. With regard to the interest on loans, 705.531,52 euros were paid as interest in 2004.

⁸² This concerns a remuneration of capital provided by the State as a shareholder (and not as a bank). During the years 1988 and 1989, the State has injected fresh capital in the ports in order to decrease the unfavourable debt position of the ports, given high interest rates at that moment. These capital injections have been repaid to the State at a fix rate (close to or higher than the market rate). A part of these advances had been paid back during the last years. For its financing, the Port Authority consults the financial markets: in 2004, the Port Authority has loaned 8 million euros on the commercial market.

2.13.2.2.3.2.3 General financing structure

In general, three flows have to be considered as financial resources for investment, maintenance and exploitation:

- Port dues and port charges. Besides port dues related to maritime traffic, charges are levied on the concession and use of the port superstructure owned and operated by the Port Authority (such as cranes, warehouses, etc.), the leasing of sites and the provision of services.
- Subsidies from the State and other public entities, for exploitation as well as investment.
- Capital loans provided by:
 - o European funds;
 - o The State;
 - o Commercial banks.

2.13.2.2.3.3 Case study: The FOS2XL project in the port of Marseilles

The container volumes in the port of Marseilles have recently increased with a growth rate of 11% during 2004. During the period 1999-2003, the total growth rate of the container volume was 25%. Nevertheless, these growth rates are far below the growth rates of the large majority of other European ports in the Hamburg-Le Havre range as well as the Mediterranean range (e.g. Antwerp 50%, Le Havre 43%, Genoa 30%). Although the port positions itself as a true multipurpose port on an operational level, on the cargo business level the traffic structure is largely dominated by liquid bulk traffic, in particular oil products (66% in 2004), with a rather small share of general cargo (16%, including containers). Furthermore, it is the container traffic growth which has underpinned the total cargo volume growth of the port in recent years, liquid bulk being stable or even in decline. As a result, the port wants to allocate more resources to the development of container traffic, under the clear condition that the port will only play a role as infrastructure manager and regulatory body, and not be involved in the exploitation of the superstructure (in contrast with existing container terminals in the port where the Port Authority provides the labour for the crane exploitation).

The FOS2XL ("Fos to excel") project aims at the construction of a container quay of 1.100 metres, of which the exploitation will be conceded to private operators. The port will act as a landlord with investment in the quay, provision of land and access to networks of ICT, rail, road, inland navigation), while the private operators will invest in superstructures (paving, buildings, cranes, rails and roads on the terminal etc.). In 2001, an international public tender was issued for the first phase (600m, of which 200m existing quays of the public terminal), a second phase (700m) was put on the international market during 2004. Both terminal concessions are under negotiation with the winning bidding parties, respectively Port Synergy (CMA-CGM/Egis Port/CNC-IFB) and MSC.

In general, for investments on behalf of the State, the Port Authority pre-finances the investment costs, and no compensation by the State is foreseen for these advances.

The technical characteristics are as follows (see Table 2-105).

Table 2-105: Technical characteristics of the terminals of the FOS2XL project

	Terminal A	Terminal B
Draught	14,5 to 16m (in 2012)	14,5 to 16m (in 2012)
Quay length	400m (+200m of existing quays)	700m
Terminal area	+/- 30 hectare	+/- 60 hectare
Capacity	300.000 TEU	500.000 TEU
Rail connection	Use of existing terminal	3 to 4 tracks of 750m to be constructed
Start of exploitation	Beginning 2009	Mid 2009

Source: Port of Marseilles (2005) internal documents

The finance structure of the project of the two terminals is as follows (see Table 2-106):

Table 2-106: Financial structure of the project of the two terminals of the FOS2XL project

Type of investment	Period	Amount (euros)
Dredging (access channel and dock)	2005, 2007-2012	61.340.000
Quays	2006-2007	72.690.000
Land reclamation and development	2006-2007	25.010.000
Hinterland and network connections	2005-2009	9.230.000
Others*	2005-2009	7.340.000
Public debate	2004	400.000
Total public sector	2004-2012	176.010.000**
Private sector (superstructures)		190.000.000
Total	2004-2012	366.010.000

* includes nature and other compensation

** Of which: Terminal A: 68 million euros; Terminal B: 107 million euros.

Source: Port of Marseilles (2005) internal documents and public debate report.

Table 2-107 shows that 52% is financed by the private sector, and 48% by public sector finance. With regard to hinterland connections, the total cost seems low in comparison with other projects (e.g. Port 2000). Besides the scale of the project, which is smaller, a lot of investments have most presumably been made in the past for the existing and operating public terminal, which is adjacent to the future quays and terminals.

The projected finance structure for the public sector is as follows (see Table 2-107:)

Table 2-107: Financing structure of the FOS2XL project

Financing authority	Amount (euros)	Source
State	16.700.000 (9,5%)	Decided December 2003
Europe*	16.700.000 (9,5%)	ERDF funds
Region	13.720.000 (7,8%)	
Department	13.720.000 (7,8%)	Contract 2002-2006
Port Authority	115.168.000 (65,4%)	Loans and self financing
Total	176.008.000 (100%)	

* Under demand.

Source: Port of Marseilles (2005) internal documents, own calculations

The Port Authority closes agreements with the different other public authorities and manages all construction works (except paving and superstructures which are managed by the private sector). There is no clear distinction on which party will finance which part of the project; an agreement is closed over the total project after which the Port Authority starts the construction works.

With regard to the coverage of the investment costs, the reasoning is as follows:

- For the State and other public entities, the “return on investment” is an increase in received taxes due to the growth of the activity of the port sector. However, no detailed calculation of the additional fiscal revenue was provided.
- For the Port Authority, financial analysis in different growth scenarios has shown that the FOS2XL project will contribute to the turnover as well as the net surplus, in order to recoup the investment costs of the Port Authority over approx. a 20-year period. In the financial analysis provided to the public debate, the Port Authority calculated that the project itself would generate (all figures in euro):
 - o In 2008⁸³, 31 millions of turnover of which 7,3 millions of net surplus;
 - o In 2009, 32,5 millions of turnover of which 8,7 millions of net surplus;
 - o In 2010, 34 millions of turnover of which 10,1 millions of net surplus;
 - o In 2015, 39 millions of turnover of which 14,6 millions of net surplus;
 - o 40 millions of turnover of full capacity is reached, with 16 million of net surplus (horizon 2021).

⁸³ Recent information from the Port Authority shows a delay of one year of the original project planning (start of exploitation in 2009 instead of 2008).

2.13.3 Work package II: Financial flows from the private to the public sector

2.13.3.1 Task II-a: Charging practices related to port operators in France

2.13.3.1.1 General framework for port operators

In general, the main flow between French port authorities and port operators consists of the concession dues paid by the port operator for the supply of land. Other flows from the port operator include the charges for the provision of (intermediary) services, such as charges for electricity supply, rents for suprastructure installations (cranes, etc.), provision of water, gasoline and other utility resources and waste collection.

In the next sections, the charging practices in the ports of Le Havre and Marseilles will be described.

2.13.3.1.2 Charging practices to port operators in the port of Le Havre

2.13.3.1.2.1 Concessions

Rents or concession dues are paid for the following infrastructures:

- Land without water area, set at 5,70 euro per square metre;
- Land with an adjacent water area, set at 5,70 euro per square metre, but increased with:
 - o Maritime water area: 385,67 euro per metre;
 - o Inland navigation water area: 139,98 euro per metre.
- Water area without land: 1,90 euro per square metre.

Furthermore, rents are to be paid for:

- The installation of superstructures on the land (cranes, etc.), according to the number of square metres occupied;
- Rails;
- All sorts of canalisations and lines (electricity, gas, telephone, water);
- Units of superstructure such as special storage boxes etc..

In general, yearly rebates are possible if the port user or the industrial firm can prove that there is a link with the maritime activities. In that case, the Port Authority and the firm will negotiate the rebate based on “activity levels” (either in tonnes or in other units if tonnes are not measurable). Rebates can be very high, and up to 2/3 of the concession dues can be recuperated if a high level of activity is reached.

If there is no direct link with the maritime activities, the Port Authority will determine the “level of interest” in the port and maritime activities. According to this level of interest (zero, weak, average, high), a rebate can be obtained by the firm, and up to 2/3 of the concession dues can be recuperated if the level of interest is considered as “high”.

For industrial firms situated adjacent to the water area (maritime or inland navigation), rebates of up to 100% are possible in function of the waterbound traffic.

The rents are fixed every year, and a document is available on demand.

2.13.3.1.2.2 Other services

The port also provides water, gasoline and other energy and utility resources to port users as well as industrial firms. These tariffs are revised annually and are included in the document on the rents for the public domain, available on demand.

2.13.3.1.2.3 Equipment charges (including terminal handling charges)

As the Port Authority owns cranes and other equipment for cargo handling and provision of other services, a tariff structure is set up for the use of this equipment.

For terminal-related equipment, in particular terminal cranes, a distinction has to be made between publicly and privately owned cranes. The reform of the activities with an increasing involvement of the private sector in the financing of infrastructure has led to a rather complex situation with different tariffs according to the ownership of the crane.

For publicly owned terminal-related equipment (cranes owned by the Port Authority), the Port Authority is fully responsible for maintenance and exploitation of the equipment. In this case, a double tariff is established based on a fixed and a variable part (e.g. per movement for containers).

For privately owned cranes, there is no fixed tariff (as the crane is owned and maintained by a private firm) and only a variable part (e.g. per container/move).

For publicly owned equipment, provided by the Port Authority, a distinction is made between the different types of equipment for renting as well as the cargo type. Table 2-108 shows the general conditions for each type of equipment:

Table 2-108: General conditions for each type of equipment

Type of equipment	Unit of tariff
Container cranes and spreaders	Fixed tariff per ½ hour and fixed tariff per move
Quay cranes	Per hour
Mobile cranes	Per hour
Floating cranes	Per hour
Handling equipment for sugar, cereals and bulk	Per tonne
Horizontal loading/unloading	Per unit or per tonne
Other equipment (e.g. passenger ships)	Per unit or flat rate

Source: Port Authority, tariff for 2005

An increase in charges is due if the equipment is to be used on Sundays and official holidays, or if supplementary hours have to be executed (in comparison with the initial order of the equipment).

For container cranes, the tariff depends on:

- The port zone (tidal terminals or terminals behind the lock, lower tariff behind the locks);
- The traffic volume per year (above 65.001 containers, the variable tariff becomes a fixed annual tariff).

In 2005, the fixed tariff per hour is set at 243,96 euro for tidal zones and 236,86 euro per hour for zones behind the lock. The tariff per move is set at 11,46 euro per move to 10,11 euro per move for tidal zones, with an annual tariff of 658.078 euros if more than 65.001 containers are handled. For terminals behind the locks, tariffs start at 11,12 euro per move to 9,84 euro per move, with an annual tariff of 647.796 Euro if more than 65.001 containers are handled.

For other cranes used for container handling, there only exists one fixed tariff by the hour (166,83 euros) and a fixed tariff per move.

For the handling of conventional cargo, only the tariff by the hour is due.

For other cranes (mobile, floating), a tariff per hour is charged depending on the capacity of the crane. For some cranes, if the handling volume passes a certain level, charges per tonne are also applied.

For handling equipment for cereals and sugar, a tariff per tonne is charged depending on the location in the port, and the package of the cargo (bulk or other).

For the handling of dry bulk, a tariff per tonne is charged depending on:

- The type of equipment;
- The type of cargo (coals, foodstuffs, etc.)
- The type of handling (e.g. to wagons or barges);
- Unloading/loading operations;

A rebate of 10% is possible if the cargo volume for the client exceeds 200.000 tonnes.

For horizontal loading/unloading (roll-on/roll-off) of car-ferries at tidal facilities (passengers, accompanied and unaccompanied lorries and trailers, project cargo), tariffs depend on the unit (e.g. 100 passengers, trailer, car, container). For other cargo, a variable part is due if the total volume per unit exceeds 38 tonnes.

Rebates are possible for passengers (up to 20%), cars (up to 20%) and lorries (up to 35%) if the total traffic of a port user (in this case a ship operator) exceeds 200.000 passengers, 50.000 passengers and 20.000 lorries.

For roll-on/roll-off traffics behind the locks, tariffs are lower. Rebates of 50 to 65% are possible for cars, if the volume exceeds 50.000 or 100.000 cars.

For ramps and platforms for equipment, passenger ships and mixed vessels (cargo/passenger), tariffs are per day or per hour, or per platform.

Finally, the Port Authority also provides labour at a cost of 48,63 euro per hour for a crane conductor up to 51,77 and 61,75 euro for professional labour and supervision.

2.13.3.1.3 Charging practices related to port operators in the Port of Marseilles

2.13.3.1.3.1 Introduction

The Port Authority divides its tariff policy in two parts, each characterized by a distinct and publicly available document:

- On the one hand, tariffs for the use of the equipment owned by the Port Authority;
- On the other hand, the port dues (for ship operators, see *infra*).

In the case of port operators, the document on the use of the equipment is most relevant, with exception of the part on ship repair which is more related to ship operators. However, as the ship repair facility is owned by the port, it has to be included in the equipment. Also, for equipment use, the document makes no distinction between a ship operator or a port operator; it refers to the port user. The document itself is well-structured and consists of following chapters:

- General conditions;
- Use of equipment;
- Renting of port installations;
- Ship repair;
- Water, electricity and telecommunications networks;
- Other.

2.13.3.1.3.2 Equipment (including terminal handling charges)

As the Port Authority owns cranes and other equipment for cargo handling, a tariff structure is set up for the use of these equipments. In general, a distinction is made between different cargo types and port activities:

- Container terminals;
- Equipment for the handling of conventional cargo;
- Equipment for horizontal loading/unloading;
- Other equipment is the Eastern part of the port;
- Mineral terminal;
- Oil and liquid bulk terminals;
- Passenger terminals;
- Other specialised installations.

2.13.3.1.3.2.1 Container terminals

A distinction has to be made between equipment under concession agreements (where the port operator charges) and publicly owned infrastructure where terminal handling charges apply (to the port user, usually the ship operator)

As in the port of Le Havre, the tariff for publicly owned cranes consists of a fixed and a variable part. The fixed part depends on the type of shift (1 shift, ½ shift or 1 hour) and the moment of the shift (normal/overtime). E.g. a full shift of 7 hours in normal hours is set at 1.547,35 euros in 2004. The variable part depends on the number of moves, for each move 4,33 euros is paid by the port user in 2004.

2.13.3.1.3.2.2 Handling of conventional cargo

Here, a distinction is made between a fixed and a variable part. For the fixed part of the tariff, a distinction is made between:

- Equipment on rails:
 - o Port area (East/West);
 - o Type of equipment (6/7 tonnes or 30 tonnes);
 - o Time of use (full shift, ½ shift, hour);
- Mobile equipment:
 - o Port area (East/West);
 - o Type of equipment (15, 40 or 100 tonnes);
 - o Time of use (full shift, ½ shift, hour).

For the variable part, the port user can choose between a tariff per tonne or per container move. For containers, the tariff is set at 26,56 euros per move. For other cargo (e.g. forest products, coils, pallets, bulk goods,...), a tariff per handled tonne is applied.

2.13.3.1.3.2.3 Horizontal loading/unloading

A tariff per shift or per year is applied for ro-ro ramps as well as pontoons.

2.13.3.1.3.2.4 Other equipment in the Eastern docks

This concerns the renting of mobile cargo recipients (25 cubic metre boxes, etc.), defence structures, barriers, pallets, etc.. Depending on the type of equipment, the tariff is based on the shift and quantity of equipment used. Specific conditions are valid for fruit and vegetable traffics.

2.13.3.1.3.2.5 Mineral terminal

A fixed and a variable tariff is applied. The fixed tariff depends on the type of crane, and is always ordered for a full shift. If the shift takes place outside normal hours (Saturday 13hrs until Monday 6hrs), a 30% increase of the tariff has to be paid by the user. The variable part is based on the tonnes handled and a distinction is made according to:

- Loading or unloading;
- Type and density of the goods (use of correction factors if the density is inferior to 0,7 or superior to 1,4);
- Type of equipment used;

- Efficiency of the operation (tonnes/hour).

2.13.3.1.3.2.6 Oil and liquid bulk terminals

The tariffs are levied by the tonne to the port user (depending on the operation the ship operator, the shipper or the receiver of the goods). The tariffs depend on:

- The type of operation (cargo handling, bunkering etc.);
- The nature of the goods (e.g. increase for dangerous goods);
- The type of product;
- Loading or unloading operations;

Furthermore, the port rents out complementary equipment such as defence structures for ship-to-ship operations.

2.13.3.1.3.2.7 Passenger terminals

A distinction is made between regular lines and cruise ships, and EU and international lines. A due is levied per passenger and per car. Furthermore, for specific equipment and services separate charges are applied, e.g. a garage for cars owned by cruise passengers, luggage conveyors, etc. Rebates can be obtained on a yearly basis and depending on the number of calls and the passenger volumes.

2.13.3.1.3.2.8 Other specialized equipment

This concerns tariffs for specialized silos, floating cranes for project cargo, health inspection materials etc..

2.13.3.1.3.3 Renting of port installations

Tariffs depend on:

- Renting under concession agreement or renting without concession agreement;
- The port area (East/West; with further specifications);
- The type of infrastructure and superstructure (paved or non-paved sites, offices, warehouses, sheds, reefer connections);
- The duration of the rent;
- The duration of the storage of the goods (dwell time charges etc.);
- The type of activity (e.g. storage, repair and inspection of containers, parking, etc.);
- Water-adjacent or not;
- The economic function of the area (logistics, other services);

2.13.3.1.3.4 Ship repair

This will be discussed in section 3.2., as it is linked to ship operators and owners.

2.13.3.1.3.5 Water, electricity and telecommunications networks

The port supplies water to the port user at a tariff per cubic metre. Furthermore, the Port Authority rents measurement equipment, connects port users to the network, rents sanitary installations (e.g. toilets), etc.. For electricity, the tariff depends on the installed capacity (kVA) and the use (in kWh). Furthermore, the Port Authority rents lights, air conditioners, mobile connections and connects port users to the network. For telecommunications, the port connects users to the network and rents communication devices.

2.13.3.1.3.6 Other

This comprises a wide array of specific equipment and services such as fire protection, different types of vehicles, statistical information, etc.

2.13.3.2 Task II-b: Charging practices related to ship operators in France

2.13.3.2.1 General framework

For the French Port Authorities, the basic rules for the charging system are similar to those of the Belgian system: both tonnage dues and mooring dues (cargo dues) exist.

In the next sections the charging practices related to ship operators will be discussed for the ports of Le Havre and Marseilles.

2.13.3.2.2 Charging practices related to ship operators in the port of Le Havre

2.13.3.2.2.1 Port dues

The port dues for a ship consist of two components:

- Ship dues related to the size of the ship in volume V, whereby the volume is the multiplication of LOA, width, and maximum draught (in accordance with the Code des Ports Maritimes).
- Cargo dues related to the amount of cargo (in tonnes or by the unit) transhipped.

The basics of this system are similar to the Belgian system with respectively tonnage dues and mooring dues (or cargo dues).

With regard ship dues related to the size of the vessel, a distinction is made between:

- The port zone, more specifically if the call takes place before the François 1er lock or behind the lock;
- The type of vessel (liquid bulk carrier, dry bulk carrier, container vessel, reefer vessel; within these categories, distinctions are made between either volume or length);
- Entry and exit of the ship (exit dues being lower).

The tariffs are revised each year in function of the business evolution, and particular rebates are possible. As an example, shortsea container vessels used for feeding from or to

transoceanic ships, with an LOA inferior to 140m, enjoyed a rebate of 70% in 2003, 2004 and 2005.

Furthermore, general rebates are foreseen in function of:

- The importance of the call (in tonnes, units or passengers), based on a parameter linking the ship capacity with the size of the call;
- The frequency of the calls.

Depending on these parameters, and the type of ship/cargo, rebates of up to 95% are possible.

With regard to cargo dues, the dues are calculated:

- in euro per tonne, based on the NST-R classification and differentiated between entry and exit;
- in euro per unit, for animals, trailers and lorries and other vehicles (not characterized by a commercial transaction), and full containers.

For full containers, tariffs differ depending on the size of the container, from 4,4411 euro per unit to 9,1992 per unit. No dues are levied for containers exiting the port.

Furthermore, dues are levied for a stay in the port longer than 15 calendar days, depending on the volume of the ship (in accordance with the Code des Ports Maritimes).

2.13.3.2.2 Other services and charges

Other services which are charged to ship operators are waste collection, provision of water and other utilities, etc..

2.13.3.2.3 Charging practices related to ship operators in the port of Marseilles

2.13.3.2.3.1 Port dues

The generic situation is the same in Marseilles and in Le Havre. Port dues for ship operators consist of a due depending on the size of the ship and dues depending on the type and amount of cargo.

With regard ship dues related to the size of the vessel, a distinction is made between:

- The port zone, more specifically the Eastern Harbour, the Western Harbour or Terminals 1 and 2 of the maritime station;
- The type of vessel (liquid bulk carrier, dry bulk carrier, container vessel, reefer vessel; within these categories distinctions are made between either volume in cubic metres or number of TEUs);
- Entry and exit of the ship (exit dues being equal or lower).

Rebates are possible in function of:

- The type of traffic. An example is the shortsea container vessels (capacity inferior to 1.500 TEU) which serve as feeders from or to transoceanic carriers (entry: rebate of 50%, exit: flat rate of 0,0875 euro per cubic metre or rebate of 50%);
- The economic importance of the call, depending on the size of the call versus the volume of the ship. Depending on the type of traffic, a rebate of up to 95% is possible.
- The frequency of the calls. Rebates of up to 45% are possible.

With regard to ship dues related to the amount of cargo, the dues are calculated based on:

- euro per tonnes, depending on the NST-R classification as well as entry or exit (exit dues being zero at the moment);
- euro per unit for animals and lorries, trailers and cars (not characterized by a commercial transaction), depending on entry or exit (exit dues being zero except for tourist buses and tourist cars).

Rebates are possible depending on the type of traffic. For example, a 10% rebate is given for cargo shipped in containers.

Furthermore, dues are levied for the stay in the port, depending on the volume of the ship (in accordance with the Code des Ports Maritimes) and on the duration of the stay (inferior or superior to 20 calendar days) after the commercial transactions have been completed (unloading/loading of goods or ship repair)

For passengers, a fixed due of 0,4985 euros per passenger is levied to the ship operator.

2.13.3.2.3.2 Other services and charges

The Port Authority also provides ships with water, electricity, telecommunications, bunkering, etc.

2.13.3.2.3.3 Ship repair

Dues for ship repair depend on:

- The type of vessel (leisure yacht or commercial and other vessels);
- Length (in case of yachts), Volume (in case of other vessels);
- Entry and exit of the dry dock;
- Tariff depending on the duration of the stay;
- Other services demanded by the owner (use of cranes and other equipment, use of water and electricity).

2.13.3.3 Description of the income and cash flow statement (sources and use) for 2003

2.13.3.3.1 Port of Le Havre

2.13.3.3.1.1 Public funding

These flows have been described and analyzed in section 2.

2.13.3.3.1.2 Turnover

Table 2-109 gives a detailed overview of the operating revenues of the Port Authority during 2001, 2002 and 2003.

Table 2-109: Operating revenue structure of the Port of Le Havre during 2001, 2002, 2003 (million euro, %)

Type of revenue	2001	2002	2003
Port dues:	83,50 (59%)	84,51 (57%)	90,59 (56%)
<i>Ship dues</i>	65,96	66,55	73,06
<i>Cargo dues</i>	15,96	16,26	16,04
<i>Passenger dues</i>	1,47	1,59	1,45
<i>Stay dues</i>	0,11	0,11	0,04
Commercial rebates provisioned	-1,57 (-1%)	-1,01 (-1%)	-1,37 (-1%)
Commercial rebates annulated	0,09 (0%)	-0,16 (0%)	0,35 (0%)
Equipment	41,14 (29%)	41,71 (28%)	45,39 (28%)
Concessions	19,18 (13%)	23,67 (16%)	25,86 (16%)
Total	142,34 (100%)	148,72 (100%)	160,82 (100%)

Source: own calculations (2005), based on Port of Le Havre internal documents

Table 2-109 shows a relatively stable revenue structure, with a moderate increase of the share of concession dues, a moderate decrease of the share of port dues and stability for the renting of cranes and equipment. In the port dues, a decrease of the share of cargo dues is observed in favour of the ship dues, according to the commercial strategy explained in the evaluation of the Port 2000 project.

2.13.3.3.1.3 Income statement, cash flow statement (sources and use)

Two types of statements and a balance sheet are provided at the end of the financial year. On the one hand, an income statement, on the other hand, a cash flow statement of financial sources and uses, in order to determine the variation in working capital. For the Port of Le Havre, the income statement is summarized in Table 2-110:

Table 2-110: Income statement of the Port of Le Havre, 2002 and 2003 (in million euros)

	2002	2003
Turnover	156,2	168,1
Production of fixed assets	7,1	11,8
Goods and services	(46,3)	(46,8)
Added Value	117,0	133,1
Exploitation subsidies	7,9	8,2
Taxes on exploitation	(1,5)	(1,5)
Personnel costs	(81,5)	(83,6)
Gross operating income	41,9	56,2
Other costs	(2,2)	(0,3)
Other revenue	(0,2)	(0,1)
Depreciation	(27,0)	(58,0)
Recuperation of depreciation / transfer of operating provision	14,5	16,3
Operating income (EBIT)	27,4	14,3
Financial revenue	2,6	6,4
Financial costs	(6,0)	(13,4)
Profit before taxes	24,0	8,3
Exceptional revenue	13,1	32,4
Exceptional costs	(31,8)	(33,7)
Net result	5,3	7,0

Source: Port of Le Havre internal documents (2005)

The cash flow statement (sources and use) for 2002 and 2003 is provided in Table 2-111.

Table 2-111: Cash flow statement (sources and use) of the Port of Le Havre (2002, 2003)

	2002	2003
SOURCES		
Net result (from income statement)	5,3	7,0
Depreciation/provision	24,7	44,6
Recuperation/Subsidies	(5,8)	(15,2)
Financing of social plan	7,4	(0,1)
Contribution equipment	(7,5)	0
Transfer or reduction of financial assets	0	(1)
Liquid assets (self financing)	24,1	35,3
Cost social plan cargo handling	0,1	(0,1)
Contributions of the State	19,4	42,7
Re-imbursements of the State	1,2	2,7
Other Contributions	46,9	42,5
Loans	33,3	80,8
Capital grants	38,1	30,5
Total of sources	163,1	234,4
USE		
Acquisitions and works	(132,2)	(233,1)
Acquisition of financial assets	(0,4)	(1,2)
Repayment of loans	(3,0)	(4,0)
Other uses	(1,0)	(1,2)
Art. L113-2 code des Ports Maritimes (State dividend)	(3,3)	(2,7)
Total of uses	139,9	242,2
Net overall variation of working capital	23,2	(7,8)

Source: Internal documents of the Port of Le Havre (2005).

If the results of the cash flow statement are confronted with the analysis in section 2, and “other sources” are to be considered as mainly finance from regional and local authorities, an almost exact matching is achieved as “Contributions of the State” and “Other Sources” match the public funding under the form of non-refundable subsidies for the years 2002 and 2003. “Loans” are private finance loans, whereas capital grants have to be refunded to the State (but are also a flow of public finance).

2.13.3.3.2 Port of Marseilles

2.13.3.3.2.1 Public funding

These flows have been described in section 2.

2.13.3.3.2.2 Turnover

Table 2-112 provides the breakdown of turnover for the years 2002, 2003 and 2004.

Table 2-112: Turnover in the port of Marseilles (2002-2004), (million euro, %)

Type of revenue	2002	2003	2004
Port dues	80,3 (53%)	81,7 (52%)	84,0 (51%)
Rent of Equipment	56,9 (37,5%)	61,4 (39%)	65,3 (39,5%)
Concessions	11,3 (7,5%)	11,1 (7%)	12,5 (7,5%)
Other products	2,9 (2%)	3,1 (2%)	3,1 (2%)
Total	151,3 (100%)	157,4 (100%)	164,9 (100%)

Source: own calculations (2005), based on the "Panorama Financier 2004" of the Port of Marseilles.

Table 2-112 shows a stable revenue structure with a dominance of port dues (approx. 50%) and rent of superstructures (including terminal handling charges) (approx. 40%).

For 2003, the public annual report provides a further insight in the revenue structure (see Table 2-106), with a division between port dues and other resources for each "business unit".

Table 2-113: Detailed insight of the revenue structure for 2003 (million euros, %)

Product/Activity	Port dues	Other revenue	Total	Share (%)
Oil products	46,5	21,7	68,2	43,3%
Other liquid bulk	2,8	1,3	4,1	2,6%
Dry bulk	10,7	5,7	16,4	10,4%
General cargo	18	18	36	22,9%
Passengers	3,3	7,5	10,8	6,9%
Ship repair	0,1	4	4,1	2,6%
Industrial zone	0	11,1	11,1	7,1%
Cooperation/training	0	0,7	0,7	0,4%
Other services	0	5,8	6	3,8%
Total	81,7	75,7	157,4	

Source: Annual report 2003, Port of Marseilles

Table 2-113 shows the dominance of oil products in the turnover. In the future, income from general cargo will probably rise due to the FOS2XL project. Other revenue in the general cargo business is relatively high, most presumably due to the terminal handling charges and the more labour-intensive character of this new traffic (in comparison with oil products).

Besides the turnover of 157,4 million euros, other operating income comes from production of fixed assets (8 million euros), cancellation and reduction of planned discounts (5,9 million euros), and transferred operating provisions (14,4 million). As a result, total operating income was 185,7 million euros in 2003.

2.13.3.2.3 Cost structure

Table 2-114 gives an insight into the operating cost structure (see table) for the years 2002, 2003 and 2004.

Table 2-114: Operating cost structure of the Port of Marseilles (2004) (million euro, %)

Type of cost	2002	2003	2004
Goods and services	40,1 (24%)	42,0 (24%)	43,6 (24%)
Taxes on exploitation	1,3 (1%)	1,5 (1%)	1,7 (1%)
Personnel costs	75,1 (45%)	77,7 (45%)	79,5 (44%)
Depreciation and provision	48,9 (30%)	52,3 (30%)	55,4 (31%)
Other costs	0,1 (0%)	1 (0%)	0,5 (0%)
Total operating cost	166,2 (100%)	174,4 (100%)	180,6 (100%)

Source: Own calculations (2005) based on Port of Marseilles "Panorama Financier 2004"

Table 2-114 shows that although the costs have risen substantially over the period (mainly given the acceleration of investments which leads to a rise of depreciation), the cost structure is very stable.

2.13.3.3.2.4 Income statement and cash flow statement (sources and use)

Table 2-115 shows the income statement of the Port Authority for the years 2002 and 2003.

Table 2-115: Income statement of the Port Authority (2002, 2003) in million euros

	2002	2003
Turnover	151,3	157,4
Production of fixed assets	6	8
Goods and services	(40,8)	(42)
Added Value	116,5	123,4
Exploitation subsidies	1,2	1,2
Taxes on exploitation	(1,3)	(1,4)
Personnel costs	(75,1)	(77,7)
Gross operating income	41,3	45,5
Other costs	(0,1)	(1)
Other revenue	(0,9)	(2,4)
Depreciation	(48,9)	(52,2)
Recuperation of depreciation / transfer of operating provision	9,3	14,4
Operating costs transfer	1,5	2,2
Operating income (EBIT)	4	11,3
Financial revenue	0,9	0,7
Financial costs	(2,2)	(2)
Profit before taxes	2,7	10
Exceptional revenue	12	18,8
Exceptional costs	(13,4)	(21,9)
Net result	1,4	5,7*

* From 2003 onwards, the Port Authority has adopted a profit sharing plan for the employees, linked to the performance of the port services. Approx. 1,2 million euros were paid out as bonuses during 2003.

Source: Annual report 2003, Port of Marseilles

Table 2-116 shows the cash flow statement of the Port Authority (sources and use):

Table 2-116: Cash flow statement (sources and use) for 2002 and 2003 (million euros)

	2002	2003
SOURCES		
Liquid assets	39,8	42,2
Sale of fixed assets	0,1	0,1
Transfer/reduction of financial assets	0,6	0,4
Capital grants	22,3	43,2
State contribution to infrastructure projects	2,7	13,2
State contribution to inland waterway works	0,2	0,2
Other contributions	19,4	30
Loans	3	6
Other sources	2,2	1
Total of sources	68	92,9
USE		
Works and acquisitions	57,9	76,9
<i>Inland waterways</i>	<i>0,2</i>	<i>0,2</i>
<i>With 80% State finance</i>	<i>2,1</i>	<i>19,5</i>
<i>With 60% State finance</i>	<i>5,3</i>	<i>6,4</i>
<i>With 100% Port Authority finance</i>	<i>50,3</i>	<i>50,8</i>
Deposits and guarantees	0	0,1
Acquisition of financial assets	0,2	0,2
Debt repayments	6,4	6,3
Other uses	1,1	2,3
Total of uses	65,6	85,8
Net overall variation of working capital	2,4	7,1

Source: Annual report 2003, Port of Marseilles

The amounts in Table 2-116 with regard to works and acquisitions are consistent with the analysis in section 2. For 2003, the State subsidised 13,2 million for investment, and ERDF and “other sources” (regions and other public entities) subsidised for about 30 million euros.

2.13.4 Conclusions

The port sector in France is changing rapidly due to a recent modification of the legal framework concerning the governance of the “Ports of National Interest”. These ports were a distinct category of ports, selected in the 1960s on traffic volume criteria, and were controlled directly by the State but mainly conceded to the local Chambers of Commerce and Industry. Other ports were Autonomous Ports (large ports of national and international interest), supervised by the State but with a large degree of financial autonomy, and Non-Autonomous Ports (smaller ports), controlled by local and regional authorities.

The governance of the Ports of National interest will be transferred from the State to the local and regional authorities before 2007, provided that in each concerned region, a 'candidate governing authority' (public authority or group of authorities) can be found. The different types of ports in the French system, have since long led to a high level of non-transparency, especially with regard to Ports of National Interest, as recognized by the French Court of Auditors in a report on port policy (1999). In that report, besides more transparency and less administrative complexity of the port sector organisation, more financial responsibility of Autonomous Ports was proposed, as well as a higher involvement of the private sector in the financing of infrastructure. With regard to the future of the Ports of National Interest, the situation remains unclear and is closely followed up by all actors involved (in particular by the Autonomous Ports which compete with these ports).

This is particularly relevant for this study, as the information on financing flows for large port development and investment programs have shown an increasing interest of local and regional authorities in the public financing of infrastructure investments (port infrastructure as well as access infrastructure), with the State withdrawing more and more from financing these projects.

In general, for the Autonomous Ports analysed in this report, the recommendations of the Court of Auditors appear to be in the process of implementation as new developments are characterized by a greater financial and operational responsibility of the private sector. More specifically, with regard to terminal-related infrastructure (paving, cranes, buildings, etc.), the private sector will invest considerable amounts in both the Port 2000 and the FOS2XL project. The infrastructure is provided by concession agreements running 25 to 30 years, with traffic guarantees and private firms operating the terminals and the cranes. It is now common to publish international tenders before conducting negotiations and signing agreements with specific parties. As a consequence, the Autonomous Ports analysed in this study are increasingly assuming a landlord function, especially when new developments are concerned or when terminals are re-engineered. For existing terminals where the Port Authority still operates the equipment, the increased financial responsibility of the management of the port, coupled with a decrease in financing from the State, as well as ambitious investment programs in order to modernise infra- and superstructures push the Port Authorities to more efficient management of their resources.

With regard to charging practices, both ports apply fairly similar charging systems, but enjoy an important degree of independence in order to answer to ongoing market evolutions and/or implement their business plans. The financial reports (internal documents provided as well as annual reports on the website in the case of the Port of Marseilles) show a relatively high degree of transparency with regard to revenues and cost structure. However, with regard to depreciation policies, it remains difficult to pass a definitive judgement as no information whatsoever is published on valuation policies. The matching of operating costs and operating income in the income statements of the ports shows that the cost for the exploitation of the ports' infra- and superstructure (terminal-related as well as the provision of services) is covered by the operating income (mainly port and concession dues).

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2.14 Portugal

2.14.1 Governance Model of the Portuguese port system and respective financing form

2.14.1.1 Portuguese port system model

The current organizational and institutional framing model of the Portuguese port system results from a set of legal diplomas, which establish the applicable legal regimen, the competences and the relationship between entities and companies managing the several economic activities at ports:

- Port Administrations, limited liability companies with exclusively public capitals:
 - Port Administration of Douro and Leixões (APDL) – Decree-Law nr. 335/98, of 3rd November;
 - Port Administration of Lisbon (APL) – Decree-Law nr. 336/98, of 3rd de November
 - Port Administration of Sines (APS) – Decree-Law nr. 337/98, of 3rd November
 - Port Administration of Setúbal and Sesimbra (APSS) – Decree-Law nr. 338/98, of 3rd November;
 - Port Administration of Aveiro– Decree-Law nr. 339/98, of 3rd November.
- Legal regimen of the State Business Sector – Decree-Law nr. 558/99, of 17th December;
- The Port and Sea Transport Institute, public institute (IPTM) was created by Decree-Law nr. 257/2002, of 22nd November, fitted with own legal status, administrative and financial autonomy and own patrimony, resulting from the merge of the Maritime Port Institute (IMP ex- Decree-Law nr. 331/98, of 3rd November), the North Port Institute (IPN – ex- Decree-Law nr. 242/99, of 28th June), the Centre Port Institute (IPC ex- Decree-Law nr. 243/98, of 28th June), the South Port Institute (IPS ex- Decree-Law nr. 245/98, of 28th June) and the Douro Navigability Institute (IND ex- Decree-Law nr. 138-A/97, 3rd June);
- Port Operation – Decree-Law nr. 298/93, of 28th August;
- Public Service Concessions – Decree-Law nr. 324/94, of 30th December.

2.14.1.1.1 Port Administrations

In what concerns port administrations, the adopted form of limited liability companies, had as target the assurance of a business-oriented management, based upon efficiency, rationality and competitiveness. They are therefore subject to the general, national and communitarian competition rules, reason for which the relationship they hold with the State or other public institutions may not result in situations, which forge or restrict competition.

Furthermore, the Portuguese port companies should be ruled by the principle of transparency, their bookkeeping should allow the identification of the financial flows between them and the State or public institutions, quite particularly in regard to public aids.

In spite of that, Port Administrations exert powers and prerogatives like the ones the State enjoys, namely:

- award of private uses and definition of the respective public interest for concession purposes;
- licensing for port activities and concession of port public services;
- expropriation for public utility and land occupation;
- administration of public domain at the area affected to them;
- fixing taxes to be charged for the port use, its services and for the occupation of domain areas;
- protection of its facilities and personnel;
- public use of services related to the port activity and its control.

The jurisdiction of Port Administrations are areas of maritime public domain, whose limits are fixed by law and they include maritime, fluvial-maritime and terrestrial areas:

- water plans (water areas located at the port service area);
- access channels, jetties, anchorage places, protection works and maritime facilities for navigation aid;
- infrastructures and superstructures built by the State, by Port Administrations or even by concessionaires, which revert in favour of Port Administrations after expiration of the concession contract;
- the public lands located in the port and adjacent areas as well as facilities acquired by the Port Administrations through donation, expropriation, acquisition or any other form;
- real estate assets and port areas of public domain affected to sea tourism, nautical leisure navigation, fishing, commercial, cultural activities or others.

Port Administrations are however subject to direct and indirect taxation according to the general terms of limited liability companies.

Beyond the fact of not depending from the State Budget, Port Administrations are net tax-payers beyond the normal taxation, being obliged to contribute to the Pension Fund of the Port Pilotage National Institute (INPP) created by Decree-Law nr 188/89 of 3rd June 4, whereby the respective yearly amount is determined by the Port and Sea Transport Institute (ITPM).

Furthermore, they have to contribute for the General Pension Fund in what concerns workers embraced by the Social Protection of Public Workers Program⁸⁴

⁸⁴ Decree-laws nr. 336/98 and nr. 338/98 of November 03rd, *Diário da República* – I Series A, nr. 254 of 03.11.98

Port Administrations are also obliged to contribute with 4,5%⁸⁵ of the respective income to IPTM's budget and to the payment of pensions due to port labour's reform made by the State in the 90ies.

According to Decree-Law 324/94, of 30th of December, the participation of private agents at the commercial management of quays and terminals improved the efficiency and quality of supplied services, having this legal tool raised conditions for a progressive release of Port Administrations from the involvement at port operations, focusing at their authority tasks.

The creation of the limited liability status in 1998, allowed a greater flexibility at the management of Port Administrations but it was conjugated with the orientations of the White Book⁸⁶ for the sector, which pointed towards a general concession plan, approved by dispatch of the Secretary of State of Transports. It led to the application of the concession rule in almost all port terminals, remaining today very few "free quays".

Port Administrations are ruled in multiple aspects by private right, but respective Board of Directors is appointed by the shareholder State represented by the Ministry of Finance in the general assembly of the limited liability company. Furthermore, it receives political guidelines from the Ministry of Public Works, Transports and Communications (MOPTC) and its activities are surveilled and controlled by the Port and sea Transport Institute (IPTM), likewise tutored by the same Ministry.

Port Administrations have to submit the following elements to the MOPTC and to the Ministry of Finances, having in view the control and follow-up of their activities:

- projects of the annual and multi annual activity plans;
- projects of annual budgets, including estimates of financial operations with the State;
- management reports and balance sheets;
- quarter budget execution reports;
- any elements suited to the integral understanding of the economic and financial situation of respective ports, their efficiency and evolution perspectives.

It is in the IPTM scope, created by Decree-Law 331/98 of November⁸⁷ 3rd, to support MOPTC in the control of the activities of port administration. Beyond that, the IPTM has the following essential attributions:

- to support the MOPTC in the definition of the maritime and port policies and on the preparation of legal diplomas;
- to assure the coordination of planning and strategic development of the maritime port system,;

⁸⁵ Decree-Laws nr.78/03 of April 2003, nr. 113/04 of Mai 2004 and nr. 43/05 of March 2005

⁸⁶ White Book on a new Maritime-Port Politics susceptible of creating a frame of bearable mobility, M.E.P.A.A.T. – D.G.P.N.T.M., 2000

⁸⁷ *Diário da República* – I Series – A Nr.254 from 03.11.98

- to conceive plans and projects for port infrastructures, as well as to analyse and to programme public and private investment plans in the areas of common interest;
- to promote port activity by establishing the articulation between sea transport mode and other transport modes;
- to assure the fulfilment of national and international norms related to the maritime and port sector;
- to support MOPTC in the introduction of communitarian policies for the maritime and port sector in the internal jurisprudence;
- to support MOPTC in the definition of learning and training policies for the sector and to promote professional training actions, having in view the modernization and the increase of productivity.

2.14.1.2 Financing model of the port system

2.14.1.2.1 Economic resources of IPTM

According to Law nr. 331/98 of November⁸⁸ 3rd, the IPTM resource origins are the following:

- a) Endowments or transferences of the State budget and co-participations or financial transferences and subventions coming from any public entity;
- b) A percentage of the trading income of each port, annually fixed by the MOPTC and transferred every trimester (4,5%);
- c) The amount of the taxes charged in the supplying of public service of its competence and in the issuing of licenses and certificates;
- d) Income resulting from the management of its patrimony, as well as assets from the State's public or private domain which are entrusted to;
- e) Sale or renting of assets belonging to them;
- f) Income resulting from service rendering contracts;
- g) Donations;
- h) Any other income granted by law, act or contract.

2.14.1.2.2 Economic resources of the Port Administration

According to Decree-Laws 336/98 of November⁸⁹ 3rd and 338/98 of November⁹⁰ 3rd which respectively create the Port Administrations of Lisbon and of Setúbal, ports economic resources are the following:

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- product of the port taxes charged to cargoes, ships and passengers due to use of the public domain and facilities for private purposes;
- the tax charged to cargoes, called Port / Cargo Utilization Tax (TUP/Cargoes), is applied to each cargo unit according to respective category or type. It should, in principle, be charged to the respective owner or legitimate representative, shipper or agent;
- the tax related to ships, called Port/Ship Utilization tax / (TUP / ship), is charged to ship-owners or ship-operators. It regards the availability and the use of systems, which assure the safety port entry, the ship port operations and safety sailing of ships, as well as environmental protection;
- the passenger traffic tax is due to the use of the terminals, utilization of passage - ways, embark and disembark of passengers and respective luggage. It is charged directly to the passengers or to the operator of the respective ship;
- concession duties and licenses for port terminal utilisation and operation;
- taxes to be charged for the use of port public domain to carry out commercial, industrial and nautical leisure activities or of services;
- taxes for warehousing and parking of cargoes;
- taxes charged to port operators related to lifting and moving equipment belonging to the respective ports;
- product of the rental of land and of facilities located in the adjacent port areas belonging to port's public domain under the responsibility of the Port Authorities;
- product of the alienation of assets, which is in general, transferred to the capital;
- taxes regarding supply of water, energy and collection of waste;
- sale of inert material (sand, gravel, etc) from the fluvial area of port public domain;
- credits, loans or income resulting from other financial operations;
- aids and subventions;
- pilotage tax due to the rendering of pilotage services by the Port Authorities.

The taxes serve the purpose of the ports' auto-financing and the "Sistema Tarifário dos Portos do Continente", approved by Decree-Law 273/2000 of November⁹¹ 09th, establishes that the Port Authorities prepare, update, approve and apply the rules they practice, related to supply of goods, services and use of public domain under respective jurisdiction.

⁹⁰ Opcit

⁹¹ *Diário da República* - I Series – A Nr. 259 from 03.11.98

Therefore, according to its philosophy and management strategy in the sense of improving its competitiveness, efficiency, attraction and client loyalty, each port adopts its own tariff regulation. This explains the differences to be observed between the Lisbon and Setúbal ports, be it on the level of taxes charged to the ships, cargoes and in the use of equipment and in the various services supplied (piloting, storage and others), as well as in the respective tax reduction and exemption system.

In effect, the private operators (concessionaires) of terminals fix their own tariffs for the services they supply, being such tariff subject to the approval of Port Authorities. These tariffs represent maximum values.

The concessions concerning the supply of port services and use of port areas for industrial or commercial activities are awarded by Port Administrations for a maximum period of 30 years.

The concessionaires, especially of the Lisbon container terminals, complain that the concession taxes and such of port use with regard to ships, to cargoes and to pilotage practiced by Port Administrations, are much too costly, thus leading to a significant increase of the total costs of container handling. Therefore, according to the concessionaires they are a decisive factor for the loss of competitiveness of the Portuguese ports, when compared with the North European and Spanish ports and, in general, in the transshipment market. This difference is maybe associated to the different port public financing models, which prejudices the Portuguese ports.

As a result of the referred cost increase, as well as of other factors of fiscal and operational nature, it becomes, especially for many clients of the north and the centre of Portugal and even of the Lisbon area, more favourable, in terms of costs, to unload their cargoes in Spanish ports, quite particularly in Vigo, or in Rotterdam, being the same hauled by truck to the final destination in Portugal.

A study prepared in 2003 by Liscont⁹², concessionaire and member of the group Tertir that is controlling 2 container terminals in the Lisbon port (one under concession of Liscont and the other one under concession of Sotágus), comparing the concession taxes and service tariffs practiced in 2001 on the Lisbon terminals with such of some European container terminals, is quite clarifying. The study compared in effect, about monthly fixed taxes of the use of public domain set by linear meter of quay, by square meters of respective yards and by square meter of covered area, as well as the variable taxes set by full container, empty container and in transit or transshipment container.

The study demonstrates that from the application of the taxes in force in some of the European terminals (Hamburg, Bremen, Italy and Barcelona) to the existing port physical and container handling conditions of the Lisbon terminals (Alcântara and Santa Apolónia), it would result for each container, the following yearly handling costs:

⁹² Lisbon Container terminals – Concession Rates and utilisation tariffs of the Port (values from 2001), Comparison with the reality in other European container terminals, Liscont 2003

Table 2-117: Taxes Scheme Alcântara Terminal

Taxes Scheme	Annual rate by container (€)
Concession Contract between APL/Liscont	13.36
Hamburg (Germany)	5.41
Bremen (Germany)	1.33
La Spezia (Italy)	2.44
Gioia Tauro (Italy)	0.44
Tercat (Barcelona-Spain)	5.42
TCB (Barcelona-Spain)	3.40

Table 2-118: Taxes Scheme Santa Apolónia Terminal

Taxes Scheme	Annual rate by container (€)
Terminal Concession Contract between APL and Sotágus	46.10
Hamburg	10.60
Bremen	3.54
La Spezia	6.32
Gioia Tauro	11.24
Tercat	9.24
TCB	8.19

2.14.2 Public Investments, responsibilities and financing sources

2.14.2.1 Investments and responsibilities

The Port Administrations are independent in the preparation of the respective investment and development plans up to a limit of 10% of the value of respective capital stock, although following the policies defined by the MOPTC. Nevertheless, all financings requiring E.U. and State co-financing or which are of a very high amount are subject to final decision of MOPTC, of the Communitarian Funds Manager or even of the Ministry of Finance.

Regarding investments, considering that the Port Administrations are entities with legal personality, the investment decisions are taken by respective Board of Directors when the involved amounts are less than 10% of the capital stock, and when the involved amounts are higher, the decision falls in the scope of the respective General Assembly.

The project evaluation is performed according to market potential criteria, and the economic needs and it is performed using technical - economic, socio – economic and financial criteria. The financing model is decided according to the involved parties, considering the economic interest and the financial and economical return rates.

For any project, studies are usually financed by the Port Administrations. When the projects are of general, regional or European interest, they are frequently co-financed by the E.U. In 2003 the following cases were registered:

In Lisbon,

- Alcântara road node study;
- establishment of the Lisbon port sea access channel;
- rehabilitation of the Santa Apolónia terminal quay for offering services to cruise vessels;
- improvement of the information port system.

And in Setúbal,

- environmental regeneration of the former Eurominas terminal;
- support facilities to a new dock “Trem Naval”;
- extension of the fishing dock;
- improvement of the fishing support facilities;
- extension of the ro-ro quay;
- reformulation of the Masterplan of the Setúbal port;
- improvement of the information and safety system of the Setúbal Port.

Although the Government acknowledges the strategic importance of the ports for the economic development and therefore considers the maritime and port system a political⁹³ priority, the today in Portugal existing legal, economic, financial and fiscal framing does not entirely ensure public investment in the port system in order to enable it to potentiate with consistency and significantly the competitive position of the Portuguese ports in short, medium and long term.

Nevertheless, assuming its responsibility, recognizing the economic interest and ports financial non-return, the State ensures basis investments, fundamental for the development and increase of competitiveness of the ports, namely:

- a) in maritime infrastructures and maritime port access infrastructures;
- b) in signalling infrastructures and navigation aid equipment;
- c) in port land access infrastructures.

Inside the port areas, the road access infrastructures are financed by Port Administration and the rail port access ones by the State.

Through the Central Administration Investment, Expenses and Development Program (PIDDAC) or the Operational Program of Accessibilities and Transports (POAT), the State

⁹³ White Book on a new Maritime-Port Politics susceptible of creating a frame of bearable mobility, M.E.P.A.A.T. – D.G.P.N.T.M., 2000

has been financially aiding Port Administrations in the investments concerning infrastructures and superstructures associated to the revitalization of the riverside areas of the ports. This fact is of greater significance in Lisbon in the restoration, remodelling of buildings, gardens, cruise vessel tourism and leisure navigation. In Setúbal, this investment is substantial in the activities related to the fishing economic sector.

In many of those investments, ports are also aided by the E.U. (FEDER, Cohesion Fund). Despite that and due to important financial volumes involved, referred investments have been contributing for indebteding of the Port Authorities.

With exception of some of the infrastructures, such as direct connection to the public water and energy supply networks, State's responsibility, the investments in basic infrastructures related to quays, yards, are either financed by Port Administrations with E.U. and State support or by privates at BOT conditions. Co-financing from the State is rare and of residual value, such as in the cases of the deepening of the Liscont container berthing docks in Lisbon and of the Multipurpose Terminal in Setúbal. Nevertheless, the E.U. aid may reach up to 50% of the total volume, when the impact of projects in the economic and social development of the regions is strong, although the financial feasibility is not assured due to the small size of the market and Portugal's peripheric localization, being nevertheless of utmost importance the impact of the projects in the economic and social development of the regions.

To the investments performed by Port Administrations are always associated use taxes. But taking into consideration the reduced traffic volume and the need to assure economy's competitiveness and the regional companies, very often tax levels do not grant the financial return of the investments.

The superstructure and its respective investments, such as the paving of the terminals, yards, and all kind of facilities, cranes, and cargo lifting and moving equipment is, as a rule, of the responsibility of the respective concessionaires. In the cases in which an asset financed or owned by the Port Authorities is used, these charge use taxes to the concessionaires or in general to all the users.

Investments in information systems, VTS, are of the responsibility of Port Administrations, in general with E.U. participation.

In Lisbon and Setúbal ports and generally in every Portuguese ports, all direct and indirect financings are registered in the respective balance sheets, according to the general accounting rules. The accounting of public investments follows the established annual amortization criteria.

2.14.2.2 Financing sources

2.14.2.2.1 WP1 Identification of public financing systems

The Port Administrations, upon deliberation of the respective Board of Directors, may seek financing sources at the financial market, issuing, if necessary, bonds and other debt titles at the internal or external stock market.

However, the State aids Port Administrations allowing concession and transfer of land property and public assets to private entities, namely public domain buildings, not affected to port activity and located far away from the maritime front.

The State also concedes supports,

a) by financing case by case some,

- port maritime access infrastructures;
- port maritime protection infrastructures;
- port road and rail access infrastructures;
- maintenance of maritime infrastructures and

b) fixing, by law, the setting up of legal provisions for risk and expenditure with at least 10% of the year's business profits. Selling assets of the ports public domain usually allows to cover financial deficits.

An important financing source of the ports in Portugal is the E.U., through the FEDER and the Cohesion Funds.

Sometimes, E.U. and Government aids don't become partially or totally effective due to lack of approval of the involved amounts or due to delays in the application procedures.

Table 2-119: WP1 Identification of public financing systems

Investments category	Elements	Responsibility	Investment coverage
1. Infrastructures			
1.1 Land	. Port areas	State (MOPTC)	State (MOPTC)
1.2 Development studies	. Infrastructural development studies	Port Authority	Port Authority with Support of E.U.
1.3 Land port access Infrastructures	. Road, rail, inland waterways, land port access connections	State (MOPTC)	State (MOPTC and Finance Ministry)
1.4 Maritime port access infrastructures	. Breakwaters . Locks/fairways . Channels; dredging . Buoys . Navigation aids (lights, etc) . Maritime traffic control installations	State (MOPTC)	State with support of E.U.
1.5 Port infrastructures	. Regeneration of land . Docks, quays, mooring dolphins . Jetties . Signalling buoys. . Navigation aids . Dredging (including maintenance)	Port Authority	Port Authority with support of E.U.

Investments category	Elements	Responsibility	Investment coverage
	. Drainage nets . Water and power supply.		
1.6 Connections inside port area	. Road, railway and fluvial connections . Channels . Tunnels and ponts	Port Authorities Concessionaires State	Port Authority (outside of terminals) Concessionaires (inside of terminals) State(railway)
2. Port Superstructure	. Paving . Warehouses and gallops . Cranes, gantry cranes and other cargo handling equipment . Pontoons, connection bridges . Administrative buildings . Terminals . Public buildings: . Fire brigades . Police; customs . Medical assistance . Pollution control . Locations for commercial and industrial activities inside the port area	Port Authority, Concessionaires Port Authority / Concessionaires	Port Authority with support of E.U. (outside of terminals under concession) Concessionaires (inside of terminals under concession) Port Authority/ Concessionaires
3. Information Systems / VTS	. Information systems and VTS	Port Authority	Port Authority with Support of E.U.
4. Management			
4.1. Maintenance	. Maintenance of maritime I Infrestructure . Maintenance of port access land Infrastructure . Maintenance of Port Infrastructure and superstructure	State State Port Authority and Concessionaires	State State Port Authority (outside of terminals and inside of terminals managed by port authority) Concessionaires (inside of terminals managed by them)
4.2 Port Services	. Cargo handling	Concessionaires	Concessionaires

Investments category	Elements	Responsibility	Investment coverage
	<ul style="list-style-type: none"> Technical nautical services: Towage Mooring Pilotage Berthing/Unberthing Cleaning Security Water supply Fuel supply Power supply 	<ul style="list-style-type: none"> Licensed companies " Port Authority Licensed companies Licensed companies Port Authority " " " 	<ul style="list-style-type: none"> Licensed companies " Port Authority Licensed companies Licensed companies Port Authority " " "
5. Legal provisions	<ul style="list-style-type: none"> Allowances, compensations subsidies to accrued capital 	<ul style="list-style-type: none"> Port Authority 	<ul style="list-style-type: none"> Port Authority
6. Sundries	<ul style="list-style-type: none"> Development of industrial areas outside of port for promote the port . 	<ul style="list-style-type: none"> State 	<ul style="list-style-type: none"> State and E.U.

Table 2-120: WP 1a Portugal 2003

FINANCING AUTHORITY	National Government	Regional Government	E.U.	Port Authority	Terminal Operator
RELEVANT CATEGORIES					
<i>Access Infrastructures</i>					(**)
Access channels (including disposal of dredging material)			100 %		
navigation aids			53%	47%	
Turning basins					
Breakwaters					
roads accessing the ports and in the ports but outside terminals				100%	
rails accessing the port and in the ports but outside terminals					
inland waterways					
<i>Terminal-related infrastructures</i>	15%		41%	44%	
quays / docks					
Jetties					
Stacking yards					
land reclamation					
<i>Suprastructures</i>					
Roads and rail at the terminal					
terminal paving / surface finishing					
port / office buildings			26%	74%	
Warehouses					
Cranes					
Mobile equipment					
<i>Operational Management</i>					
only direct subsidies					
<i>Legal Provisions</i>				100%	
Others	5%		51%	14%	30%

2.14.3 Organization of port services and charging practices at ports

2.14.3.1 Organization of port services

The existing organization of the port companies, public capital limited liability, in Portugal, as referred to in the Decree-Laws nr. 280/93 and nr. 336/8⁹⁴, must materialise one of the Government's goals, with a view to the evolution of the port management model in direction to a strongly efficient and competitive enterprise level, for the safeguard of the national economic interests. Thus, it is a duty of the general interest ports, in principle, to organize their services in order to enable them to contribute to the economic and financial balance of the public sector, as well as to meet the community needs with adequate levels.

In Portugal, port services are supplied either by Port Administrations or by private companies under concession or license contracts. However, terminal running or service supply through licence must have public service nature for the ships. There is also the case of industries running port terminals under private use for moving exclusively cargoes to and from their own plants.

Table 2-121: Port Services

Services	Service providers
1. Port Services	
1.1. General Services	
a) Organization, coordination and control of port maritime and land traffic.	Port Authority
b) Coordination and control of operations related to port basic trade services and other activities	Port Authority
c) Signalling, buoys and other navigation aids for vessel approaching and accessing the port, interior buoys	Port Authority
d) Installation and maintenance of buoys intended for maritime fostering	Concession holder or licensed company
e) Surveillance services, security and police	Port Authority or licensed company
f) Lightning of common areas at land and sea	Port Authority or licensed company
g) Cleaning of common areas at land and sea	Port Authority or licensed company
h) Quay cleaning as a consequence of the cargo storage and handling, as well as leakages	Port Authority / Concessionaires or licensed company
i) Emergency prevention and control (fire prevention and extinction, rescue, contamination fighting)	Competent administration
1.2. Basic services	
a) Pilotage	Port Authority
b) Technical-nautical services	
Towage	Licensed companies

⁹⁴ Opcit

Services	Service providers
Mooring	Licensed companies
Vessel unmooring	Licensed companies
c) Passenger services: Embark and disembark Load and unload of luggage and cars	Licensed companies, concessionaires or Port Authorities in terminals managed by them as cruise vessels terminal at Lisbon.
d) Handling of cargoes, transhipment, storage and carriage (at port's area)	In general, Concessionaires or Licensed companies (Stevedores). Port Authorities in terminals managed by them as Ro-Ro Terminal at Setúbal and cruise vessels terminal at Lisbon.
e) Collection services for waste raised by ships Solid waste collection Liquid waste collection	Licensed companies
2. Commercial services . Ship agents . Forwarding agents . Fish wholesalers . Fuel suppliers . Sundry material suppliers . Suppliers of mechanical equipment and others . Sundries	Authorised companies
3. Services of navigation aid (safe entrance and sailing operations of ships)	Port Authority

2.14.3.2 WP2 Charging practices at port

2.14.3.2.1 WP2a Practices relatively to port operators

At Portuguese ports, Port Administrations charge taxes for the use of respective areas - infrastructures - for the supply of services and occupation of the areas of public domain⁹⁵ for carrying on commercial or industrial activities. Are equally charged taxes when Port Authorities award licenses for execution of diverse works at the respective jurisdiction areas.

The taxes are applied upon ships and cargoes. They are essentially related to the use of infrastructures, channels, navigation aid systems, safety and environmental protection under port jurisdiction. Other taxes refer to compulsory pilotage services (except in certain cases) to towage services, which are also compulsory, whenever requested by pilots who decide the number of tugboats. Other taxes are linked to the use of port equipment and personnel.

The use of port's public domain for commercial or industrial activities and service supply to third parties is subject to allowances under concession or license legal forms. From those allowances are resulting the charging on the one hand of taxes in the form of rents when it is

⁹⁵ APL and APSS duty regulations, 2005

the case of concession of port areas, terminals or even river-side public domain operations (up to 30 years, depending on the private investment to be done) and, on the other hand, of taxes applied on the licenses (allowances of 1 to 5 years – in case of small investments).

Thus, concessions include the exclusive use of assets of port's public domain in a terminal, for the supply of services, as well as handling of cargoes and for carrying on other connected activities.

In general, such connected activities are only allowed by the Port Authorities, as long as:

- they do not jeopardise the main object of the concession;
- they are relevant to improve the global quality of the public service, the economic balance of the business or the optimisation of the use of the concession resources; and
- they do not distort the competition rules in the port sector.

The resources of the concessions are the infrastructures, the facilities and fixed lifting equipment put at disposal of the terminals by the Port Administration, as well as the equipment incorporated or installed by concessionaires. Port Administration's equipment may, however, be transferred to the property of the concessionaire, upon payment of an amount agreed between the parties. In those cases, where the Port Administration holds the property, the use of them is compensated by the payment of a tax.

As a rule, the following are considered assets put at disposal of the concessionaires by Port Administration:

- the maritime berthing infrastructures such as quays, bollards and maritime support instruments;
- yards including all existing infrastructures, as water, power, sewerage, lightning networks, pavings and internal accesses;
- the installations;
- the fences.

It is a duty of the concessionaires the conservation and maintenance of the assets under concession, which revert for the Port Authority at the termination of the concession contract.

Concessionaires are responsible for the construction of new facilities approved in the scope of the general development plan of respective terminals. And, in the case of extension of the concession areas, concessionaires are also responsible for the construction of respective facilities, infrastructures, paving works, foundations and above referred networks, as well as for any rail access considered necessary to respective terminals.

In what concerns taxes charged to the use and trading of port facilities put at their disposal, concessionaires have to pay to Port Authority fixed taxes related to the public domain, as well as variable taxes applying upon all operations, which they carry on.

The fixed taxes, paid one month in advance are applied for the use of:

- the quays, charged by linear meter;

- the areas of yards, charged by square meter;
- the facilities included in the concession, charged by square meter.
- The variable taxes, with an imposed minimum amount and invoiced immediately after termination of each operation, are charged by container/year, namely:
 - for each go in or go out movement of containers, with a reduction according to the quantity;
 - for each ton of handled general not containerised cargo (loading/unloading);
 - for each moved vehicle (loading/unloading).
- Besides all these taxes, the concessionaire assumes the obligation of paying:
 - the consumption of water and power in the concession area whenever supplied by the port;
 - the taxes for service, which according to the law or to the port's regulation are compulsory supplied by Port Administration to the concessionaire at the concession area;
 - other taxes concerning activities, uses or services not foreseen in the concession contract, but extraordinarily allowed by the port upon request of the concessionaire.

For taxes payment delays, in other words 30 days after respective invoicing, Port Administrations charge delay interests.

The tariffs in force at concessions, as well as such the one practiced by licensed companies are part of a regulation prepared by the concessionaires and approved by respective Port Administration. This regulation is yearly updated and revised and it includes:

- maximum tariff values;
- the procedures for calculation and charging;
- the systems and supports for information and disclosure of tariffs; and
- the means available to the users for clarification and claim.

Upon authorization from the respective Port Administration, concessionaire companies may outsource stowage services to stevedoring companies and others, as long as referred companies are licensed by the same Port Administration. The tariffs are used by those companies must also be approved by the respective Port Administration.

Relatively to financings, the concessionaires are responsible for any considered by them as necessary for the development of activities they are bound to by respective concession contracts. Port Administrations are not subject to any obligation and do not assume any responsibility or risk.

2.14.3.2.2 WP2b Practices related to the ship operators

The ports charge taxes to ships and boats for the port use is calculated by unit of gross tonnage (GT), generally for indivisible periods of 24 hours and for type of ship.

Free from taxes are:

- hospital ships;
- ships of the Portuguese Navy or of foreign countries in situation of reciprocity or when in official visit;
- ships in scientific, cultural or solidarity mission;
- ships calling the port just for crew change and embarkation or disembarkation of sick or deceased people;
- tugboats and floating equipment (i.e. cranes) serving the port or licensed;
- local traffic and coast fishery boats with GT equal or lower than 5 Ton.

Beyond the exemptions, there are other cases where taxes have reductions, according to the purpose of the ship's call, to the service intended to be used by the ship (commercial, repair, mooring) and whether it is a short sea regular service or a deep sea regular service, as well as bulk carriers with Bureau Green Award certificate and other cases foreseen in the law, as when ships of regular services benefit from loyalty rates after the 6th call.

All taxes are charged to the port shipping agent representing the ship owner or to the ship operator.

Table 2-122: Summary of the financial flows between Port Administrations and private service providers

Payment from	Reason of payment	Receiver of payment	Final Beneficiary
1. Terminal operators		Port Authority	Port Authority and State
	a) Rent of port areas		
	b) Rent of equipment to Port Authorities		
	c) Licenses and Authorizations		
	d) Concessions		
	e) Remuneration of general interest services (lighting, cleaning and maintenance of common areas)		
2. Ship operators		Ship port agents	Port Authority and State
	a) Rates referring to entrance and sailing of ships of the port area (maritime signalling, pilotage)		
	b) Anchorage		
	c) Mooring and unmooring		
	d) Quay rent		
	e) Fuel supply		
	f) Water supply		
	g) Power supply		
	h) Collection of waste produced by the ship		
	i) Passengers embark and disembark		

2.14.4 Ports

In the frame of the Europe division by regions and in what concerns the hinterlands, which serve respective ports and areas of cargo attraction and generation, Portugal is integrated in the Atlantic region. The Lisbon port is located in the Tagus river estuary and the Setúbal port in the estuary of Sado River.

2.14.4.1 Lisbon Port

2.14.4.1.1 Characterization of the territorial area and port structures

A – Territorial Characterization

The Lisbon port belongs to NUT III –Region of Lisbon and Tagus Valley and is integrated in the Central Metropolitan Area that has as fundamental characteristic a dense urban occupation occurring the Tagus riverbanks.

The jurisdiction area of the Lisbon Port Administration (AP) extends along the Tagus riverbanks. The area, in the river North bank, presents discontinuity, has an extension of approx. 50 Km. In the South bank, also with several discontinuities, extends for approx. 75 Km.

In the North bank, the riverfront where are concentrated o the port operations is limited to two strips Alcântara – Santos and Santa Apolónia that are completely involved by the city and present spatial problems hindering any port extension. This urban spatial pressure tends to increase and therefore to an unaffectedness of the port and industrial use of those strips, on favour of housing, commerce and non-port service uses.

On the other hand, the significant traffic of heavy trucks with origin and destination in the Lisbon Port strongly penalizes the entire riverbank by causing a traffic jam worsening and resulting atmospheric pollution. For example, one should refer the Alcântara terminal rail access, that crosses a vast important leisure area consisting of restaurants and bars.

In the Tagus South bank, the Lisbon Port activities spread along two zones. Its spatial occupation pattern is less dense than the one in the North bank. Though there are some situations of spatial confrontation between the port and the city, port activities are not subject to a high urban spatial pressure. The area of Almada-Trafaria includes several oil and grain terminals, which conflict with the urban area in terms of visual pollution, heavy trucks traffic and smells and dusts (air). The Barreiro area has an urbanization plan issued by the Town hall, which includes the areas of one of the current terminals.

The hinterland of the Lisbon port is the centre–south region of Portugal, having recently spread to the north of the country until the Spanish region of Galiza, particularly resulting from a regular railway transport service of containers organized by Liscont, from its terminal to the North of Portugal and Galiza.

B- Port Structures

The port of Lisbon terminals present some limitations in terms of depths near the quays, extension, lifting equipment and spatial reserves for expansion, with exception of Trafaria and Barreiro It's clear, essentially, relevant limitations regarding the yard areas as well as restrictions resulting from limitations to road traffic.

The terminals in the North bank are the following:

- terminals specialized in container movement;
- 1 deactivated terminal (Santos);

- 1 deactivated fishery port and several infrastructures, as well as fishing and recreation support installations;
- terminals for passengers transport;
- 1 general cargo terminals;
- 1 grain terminal.

The terminals in the South bank are the following:

- 10 terminals specialized in the handling of solid and liquid bulks, distributed by the cities of Almada, Seixal and Barreiro;
- Several river passenger boat terminals.

The following concessions were awarded in the Port of Lisbon:

- Santa Apolónia Container' Terminal;
- Alcântara Container' Terminal;
- Lisbon All-purpose Terminal;
- Poço do Bispo All-purpose Terminal;
- Beato All-purpose Terminal;
- Beato Silopor Terminal;
- Trafaria Silopor Terminal;
- Tagol Bulks Terminal;
- Barreiro Atlanport General Cargo Terminal.

2.14.4.1.2 WP1b Investments and public financing

The Lisbon port is presently undergoing a deep change of its vocation. It is betting increasingly and thus primary investing in the recovery and improvement of its riverbanks zones, in the sectors of restaurant business, architecture artistic performance, gardens, tourism activity associated to cruiser ships and nautical leisure. This option is being implemented in articulation with the urban development plans of each one of the 11 municipalities of the region.

On one side, that bet has brought the port to increasing indebtedness and investments in its vast riverbanks which, although neither reproductive nor financially feasible, has a very important impact on the population life quality and in the promotion of new economic activities, more adequate to the urban environment desired for the Portuguese capital, which should be financed, without return, with support of the city budget for projects of social nature.

And on the other side, it has been causing the non-expansion and even a progressive deactivation of terminals located in the North bank dedicated to cargo handling, with their transfer to other port areas or even to other ports. This situation includes also shipyards.

It is in this context that, the Investment Plan of the Lisbon Port points out to the need of investing increasingly in port urban accessibilities, in terminals for cruise ships, in restructuring and expansion of the docks and nautical repair workshops, in the waterside recreative and restaurant business areas, as well as in the rehabilitation and modernization of buildings and in setting of gardens and walkways along the river.

Consequently, from 2002 to 2003, a strong change of strategic nature has been noted at the port services component, with investments primarily directed to the maintenance of quays and yards, which must still continue operational and, also to the purchase of information systems providing a easier and faster cargo handling.

The State financing was practically withdrawn after the aid given in 2002 for the deepening of the Alcântara container quays up to -13m (ZH). A quay that, according to the traffic forecast, will be in the future merely used by cruise ships.

For 2003 were foreseen investments amounting to € 11,596 Mio, namely 9,196 Mio of the Port Administration (APL), 1,076 Mio of communitarian non-refundable aid, 261 thousand from Câmara Municipal de Lisboa (CML) and from REFER and, finally, 1,053 Mio from the State for the Alcântara road and rail transport nod Project, were foreseen.

The European Union would essentially support the studies related to the Alcântara road and rail transport nod, the construction of the Access Channel to the Lisbon Port, the rehabilitation of Santa Apolónia Jardim do Tabaco Quay to be used by cruiser ships and the improvement of the Port Information System.

Analysing the aids in terms of infrastructure, superstructure and operational management, unlike the European Union, the Portuguese State limited its support to the urban transport superstructures.

Similar to previous years, in 2003 some projects had to be postponed, either for lack of approval of the foreseen subsidies or by bureaucratic reasons.

From a foreseen investment volume of 11,506 €Mio only 3,410 €Mio were carried out, i.e. 29%. And the financings received by the port were from the EU in the amount of 0,278 €Mio, and from the State (PIDDAC), non-refundable, in the amount of 0,300 €Mio.

Table 2-123: WP 1b: Port Lisbon 2003

FINANCING AUTHORITY	National Government	Regional Government	EU	Port Authority	Terminal Operator
AMOUNT FOR 2003					(**)
RELEVANT CATEGORIES					
Access Infrastructures					
Access channels (including disposal of dredging material)			122 587		
Navigation aids			154 300	134 700	
Turning basins					
Breakwaters					
Roads accessing the ports and in the ports but outside terminals				245 768	
Rails accessing the port and in the ports but outside terminals					
Inland waterways					
Terminal-related infrastructures					
Quays / docks				884 000	
Jetties					
Stacking yards					
Land reclamation					
Superstructures					
Roads and rail at the terminal					
Terminal paving / surface finishing					
Port / office buildings				1 198 000	
Warehouses					
Cranes					
Mobile equipment					
Operational Management					
Only direct subsidies					
Legal Provisions				78 053 000	
Others	300 000			670 000	

2.14.4.1.3 WP2 Payments Flow

During 2003 the Lisbon Port Administration registered operating profit amounting to € 49,491 Mio, of which € 1,672 Mio resulting essentially from the accounting of EU and State subsidies and € 1,293 Mio related to Extraordinary Profits⁹⁶.

2.14.4.1.3.1 WP2a Payments from the port operators

The payments from port operators concern cargo handling, facilities and equipment renting, concession and license taxes, as well as recreation nautical activities.

The Concessions amount regarding the use of public domain was higher than the one from the port concessions, representing 31% of the port total revenues in 2003.

Table 2-124: WP 2a: Payments from the Terminal Operator 2003 in Lisbon

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	4 486 000
Cargo dues	
Cargo stacking	
Warehousing	378 000
Equipment dues	107 000
Other dues	
Pilotage dues	
<i>Concessions</i>	21 196 000
<i>Supplies</i>	
<i>Other Operation Revenues</i>	837 000
<i>Other Revenues (public domain)</i>	11 772 000

2.14.4.1.3.2 WP2b Payments from ship operators

The payments made from ship operators concern maritime signalling, pilotage, port taxes, supplies and services to passengers, to sportive and leisure boats.

⁹⁶ Port of Lisbon Administration – 2003 Activities and Management Indicators Nov. 2004

Table 2-125: WP 2b: Payments from the Ship Operator 2003 in Lisbon

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
Cargo Revenues	
Port dues	4 141 000
Cargo dues	
Cargo stacking	
Warehousing	
Equipment dues	
Other dues	
Pilotage dues	4 084 000
Concessions	
Supplies	865 000
Other Revenues	3 573 000

2.14.4.1.4 Traffic Statistics

Table 2-126: Lisbon 2003 – Traffic Statistics (cargo figures in thousands of tonnes)

	2003	2002	Var. %
1. Number of vessels	4 420	4 666	-5
G.R.T.	40 688	38 019	7
2. Number of TEUs	552 961	487 529	12
3. Passengers (Maritime)	211 979	164 259	29
4. Cargoes loaded/unloaded	11 386	11 214	2
4.1 Oil products	1 493	1 766	-16
others liquid bulks			
4.2 Solid bulk	4 781	4 963	-4
4.3 Containerised cargo	4 661	3 897	12
4.4 General cargo	451	588	-23

Source: Porto de Lisboa – Relatório e Contas 2003

2.14.4.2 Setúbal Port

2.14.4.2.1 Characterization of the port areas and structures

A – Territorial Characterization

The Setúbal port, belonging to the same NUT as Lisbon, is however located in the so-called Metropolitan Periphery, which presents a relation of high dependence from the Metropolitan Central Area.

The area of jurisdiction of the Setúbal Port stretches continuously along approximately 14 km of the north bank of the Sado river estuary. It is included in that area all riverside front from the City of Setúbal and, on the East, the most relevant port facilities, physically separated from the city and with own accessibilities. The Setúbal Port has an 8 Km strip extending from its Far East area up to the urban city limit. Thus, unlike Lisbon the Port of Setúbal has a high extension and development potential without harming the quality of the urban life.

The only relevant contingency factor of port operations in the Setúbal Port is linked to the fact that in its involving area is located the Natural Reserve of the Sado river. As a matter of fact, the expansion of the existing maritime accessibilities would require significant dredging works in the Sado estuary, with a considerable level of environmental impact, that has to be necessarily evaluated.

Having vast port and logistic areas associated to a privileged location near the large urban and logistic centres of the Lisbon and Tagus Valley region, one of the most developed of Portugal, the Setúbal Port undertakes, increasingly, an important role in the centre and south region of the country. A role of a sea linking platform to the African and American continents and, in the short sea traffic between the Mediterranean and the North Sea.

Thus, the development plan of the port foresees the extension of its hinterland until Madrid and the Andalusia Region, through significant investments⁹⁷ on:

- improvement between the port secondary access networks and its main networks;
- development of a multi-modal link corridor to Spain (Madrid e Andalusia regions);
- development of the short sea transport in articulation with the transport of goods by rail;
- set-up of logistics platforms.

Sharing the same hinterland with the Lisbon Port, it is to foresee that, with the increasing tendency of changing some port uses to leisure and tourism ones in the Port of Lisbon, the Setúbal Port will benefit of certain traffics, in particular such of short sea containers.

B – Port Structures

The Setúbal Port is a natural port without spatial problems, whereby the port sea area stretches in the north bank of Sado River with following terminals, some public, others private:

- public terminals for cement and other solid bulks handling;

⁹⁷ APSS- Administração dos Portos de Setúbal e Sesimbra S.A . - Plano de Actividades e Orçamento 2003 p.8

public Ro-Ro terminals;

2 multi-purpose terminals (1 for general cargo and 1 terminal with characteristics to be used as a container terminal, by having 700 m of berthing quays, with relevant expansion possibilities);

- 2 terminals for fuel and oil products;
- 1 private terminal for coal handling;
- several industry facilities with own terminals for the handling of bulk cargo;
- 7 private terminals for the handling of solid and liquid bulk;
- small private terminals for general cargo;
- 2 terminals for ferry boats;
- several facilities for the support of recreative nautical sports ;
- 1 fishery terminal;
- several naval ship repair terminals, one of them with several docks for sort-sea vessels, named Lisnave.

2.14.4.2.2 WP1b Investments and public financing

In view of the prosecution of the main strategic goals, the Port of Setúbal is betting in the investment for the recovery and development of the full area and its jurisdiction, namely the modernization of the port infra structures.

In this way, the Masterplan of the Port of Setúbal points out to the need of investing in the expansion of the capacities related to the supply of public services to containerised cargoes, to roll-on roll-off cargoes (new vehicles and Short Sea Shipping) and solid bulks (Cement, Clinquer and agriculture food stuff).

Although not having the importance occurred in Lisbon, the revitalization of the Setúbal Water Front, in the areas not considered by the Polis Program, a urban regeneration program of the Government, requires a substantial effort of investment from the Setúbal Port Authority (APSS), without any financial return. The same situation can be applied to the development of the activities in the fishing sector.

It is in those cases that the financing of the Portuguese State assumes a higher importance. The PIDDAC's priority has been given to fishing or waterside urban regeneration projects, which have simultaneously the support of the European Union, once they have no financial feasibility and are often subject to high quality demands of the population.

For 2003 investments were foreseen of around €16.624 thousand , of which €9.867 thousand, financed by Port Authority (APSS), €5.300 by means of communitarian support at lost funds and €1.459 thousand with the State support through the PIDDAC.

PIDDAC would exclusively support the Enlargement of the Fishing Dock as it happened in fact.

The European Union would essentially support the studies concerning the Environmental Recovery of the old Terminal Eurominas, the Backup Installations of the new dock Trem,

Naval, the Enlargement of the Fishing Dock, the improvement and extension of the support facilities the fishing activities, the studies concerning the upstream extension of the Roll-on Roll-off quay, the reformulation studies of the Masterplan of the Port of Setúbal and the improvement of the Information and Security System of Setúbal Port.

Also in 2003 some projects had to be postponed due to the lack of approval of the foreseen subsidies.

If we analyse the foreseen investments for the years 2002 and 2003, classifying them in the categories Infrastructures, Superstructures and Operational Management, it becomes evident that the Portuguese State would essentially aid the first two categories.

Table 2-127: Fulfilment of the Investment Projects 2003 (thousand €)

	SUBSIDIES Received during 2003		
	Realization	EU	Sate
Quality and Safety Management System		27,19	
Environmental and Functional Recovery of Eurominas Terminal			
Support facilities of the new dock Trem Naval			
Extension of the Fishing Quay	2 605	3 489,02	1 240
Fishing support building	140		
Upstream extension of ro-ro quay			
Extension of the fish lot and rehabilitation of the locker building			
Waterfront			-18
Preparation of Zone 1 of Multipurpose Terminal		2 893	
Downstream extension of ro-ro terminal			
Recuperation of maritime activities			
Elaboration of the Masterplan for the accessibilities and logistics		192	
Port integrated information system	903		
Others			
Total	3 648	6 601	1 222
	22%		

The financial co-participation for investments carried out during 2003 was assured by EU funds (Feder and Cohesion Funds), by State subsidies (OE/PIDDAC) and by Port Authority own funds, having been registered following resources:

Resources	Amount in €000	(%)
Internal	1 836,09	50,33
External	1 812,10	49,67
Subventions:		
FEDER	572,26	15,69
PIDDAC	1 239,84	33,99
TOTAL	3 648,18	100,00

These values do not coincide with those referred in the map “Fulfilment of the Investments Projects in 2003” once, during 2002, the financing of the Investments Plan was covered in great part by internal resources (70,45%), as delays occurred in the release of the EU funds, which have been only received in 2003 together with those of 2002.

Table 2-128: WP 1b Port Setubal 2003

FINANCING AUTHORITY	National Government	Regional Government	EU	Port Authority	Terminal Operator
AMOUNT FOR 2003					(**)
RELEVANT CATEGORIES					
Access Infrastructures					
Access channels (including disposal of dredging material)					
Navigation aids					
Turning basins					
Breakwaters					
Roads accessing the ports and in the ports but outside terminals					
Rails accessing the port and in the ports but outside terminals					
Inland waterways					
Terminal-related infrastructures					
Quays / docks				2 893 210	
Jetties					
Stacking yards					
Land reclamation					
Superstructures					
Roads and rail at the terminal					
Terminal paving / surface finishing					
Port / office buildings	1 240 000			3 489 000	
Warehouses					
Cranes					
Mobile equipment					
Operational Management					
Only direct subsidies					
Legal Provisions					781 000
Others				218 880	1 836 080

2.14.4.2.3 WP2 Payments Flow

In 2003 the Port Authority of Setúbal had profits amounting to € 17.780 thousand, of which € 3.756 thousand linked to extraordinary profits, related essentially with the accountancy of the communitarian and State subventions. The remaining profits are operational, resulting of Port Authority activity.

Have contributed to the operational profits assets as concession and licence taxes, taxes charged to the use of the access canals, the use of navigation aids and pollution control, the use of port facilities, yards and equipment for cargo handling, as well as taxes concerning the supply of water and energy, pilotage services, waste collection and taxes charged to the use of port domain areas for carrying on other commercial or industry activities.

2.14.4.2.3.1 WP2a Payments from port operators

The payments related to the operators concern the following services:

- cargo handling;
- use of facilities and yards;
- equipment renting;
- personnel supply;
- concessions of public domain;
- licenses of public domain.

Table 2-129: WORKPACKAGE 2a: Payments from the Terminal Operator 2003, Setubal

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	
Cargo dues	2 859 000
Cargo stacking	50 000
Warehousing	400 000
Equipment dues	746 000
Other dues	93 000
Pilotage dues	
<i>Concessions</i>	2 036 000
<i>Supplies</i>	569 000
<i>Other Operation Revenues</i>	4 541 000

2.14.4.2.3.2 WP2b Payments from ship operators

Payments referring to ship operators result from taxes charged to:

- use of port areas and facilities;
- signalling services;
- pilotage and towage services;
- supplies;
- passengers embark/disembark;
- services supplied to sportive and recreation boats.

Table 2-130: WORKPACKAGE 2b: Payments from Ship Operator 2003 in Setubal

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	2 272 000
Cargo dues	
Cargo stacking	
Warehousing	
Equipment dues	
Other dues	57 000
Pilotage dues	2 528 000
<i>Concessions</i>	
<i>Supplies</i>	769 000
<i>Other Revenues</i>	569 000

2.14.4.2.4 Traffic Statistics

Table 2-131: Setúbal 2003 – Traffic Statistics (cargo figures in thousands of tonnes)

	2003	2002	Var. %
1. Number of vessels	1 611	1 661	-
G.R.T.	16 583	16 650	-
2. Number of TEUs	12 052	5 139	57
3. Passengers (river)	1 523 126	1 470 840	3
4. Cargoes loaded / unloaded	6 091	6 033	1
4.1 Oil products others liquid bulks	1 323	2 131	-11
4.2 Solid bulk	2 883	2 191	32
4.3 Containerised cargo	111	70	58
4.4 General cargo	1 391	1 641	-15

Source: Porto de Setúbal – Relatório e Contas 2003

2.14.5 Conclusions

The funds of the State flowing into the port are of small volume and applied in a very rigorously manner for specific public investments, usually non-refundable and without financial return. In the national ports there are no other loans or capital injections directly made by the State.

In case of need and lack of income to cover the operational costs, Port Authorities may ever increase port taxes. For long-term investments and short term treasury financing, the Port Authorities often negotiate bank loans in the financial market, at market prices and without any State guarantee.

Although ports are in general facing deficit situations, it is unknown that the State has once granted following forms of financial aid:

- a) compensation for operating losses;
- b) provisions of capital;
- c) non-refundable grants or loans on privileged terms;
- d) foregoing profits or foregoing recovery of sums due;
- e) foregoing a normal return on public funds used;
- f) compensation for financial burdens imposed by public agencies.

However the sale of real state previously donated or financed by the State or by E.U. and the incorporation of assets partially or totally financed by them in the value of the concession taxes represents state aids to ports. But in this last case, the taxes practised refer to

amounts which do not harm the region's competitiveness, do not allow the full return of the total invested amount and, in most cases, are limited to the return of the investment component of port authority, as defined at the application for communitarian funds.

As a matter of fact, the Ports of Setúbal and Lisbon are located in the centre of respective cities, in areas where the opportunity cost is very high (in special in Lisbon) due to the real state market and leisure and tourism commercial activities.

In what concerns reduction or exemption from general forms or levels of tax relief, although not granting it in general, the State is directly aiding financially Port authorities by exempting ports from autarchial (local) taxes, when they are investing in buildings or, in general, in installations at the areas of public domain under their jurisdiction.

Similar to any other company, the Port Authorities budget includes the wages, social welfare and the medical assistance to the port administration staff. And also the staff pensions, as well as other provisions and other direct and indirect taxes.

2.14.6 Bibliography

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2.15 Denmark

2.15.1 Description of port sector organisations for Denmark

The framework for Danish ports has been determined in the Danish Port Act (Act 326 28. May 1999), effective from 1 January 2000. For historical reasons the Port of Copenhagen has its own Act (being a state-owned, joint-stock port), which, however, only differs from the general act on a few issues. The purpose of the Port Act is to give the ports the possibility to form their role in the general transport pattern in order to be more dynamic and competitive. The Port Act was last changed through Act no. 1221 of 27 December 2003, which added Ship and Port Facility Security (ISPS code).

The ports' options to offer port services depend on the form of organisation. The possible forms of organisation for ports according to the Port Act are:

- 1) State port (the second-last state port has just been transferred to the municipality)
- 2) Municipality port (ports with a freight turnover less than 0.5 million ton per year)
- 3) Municipal self-ruling port (an independent business with its own management)
- 4) Port organised as a joint-stock port, wholly or partly owned by the municipality (Copenhagen by the state)
- 5) Port organised according to civil law.

The only **State Port** left (1) is not really competing with the other ports.

The **municipal ports** (2) are regarded as part of regular municipality business and do not actually compete with other ports in the freight sector. Thus the municipality may, as for these ports, decide that the port areas, for example, be disposed of differently, under the condition that this does not violate regional legislation regarding use of land etc. When a municipal self-ruling port (3) shows a deficit for 3 successive years, it is normally required that it is transformed to a municipal port (2). The municipal ports have the least degree of independency, as their responsibility is limited to infrastructure within the port's geographical area.

The **municipal self-ruling port** (3) is an independent business, which is managed by the municipal council where the port is situated. The assets of the port must, pertaining to accounts, be kept separated from the assets of the municipality, and it is managed in a way that the income covers the expenses, at least. Within the determined framework the management is free to dispose of the means for building and operation, but the means may only be used for purposes that serve the interest of the port. A self-ruling port must provide supra-structure such as cranes etc.

A port can be organised as a **joint-stock port**, wholly or partly owned by the municipality (4), and is then compared with state-owned, joint-stock ports in the Companies Act and the Annual Accounts Act. These ports are further allowed to carry out port related operations, such as, for example, stevedoring.

Finally, the **ports organised according to civil law** (5) are not limited in their business performance.

The legislation is thus stating, that independency for a port to increase its business area is closely connected to the extent, to which the municipalities are willing to relinquish the reins and privatise the port. Within this framework the municipal council of many of the small ports have chosen to stop normal traffic port business and use the areas for other purposes as seen in the ports of Haderslev and Holbæk, among others.

Other municipalities have chosen to organise the port as a joint-stock port, partly or wholly owned by the municipality. This applies for ADP (Fredericia and others), the ports of Aalborg, Grenaa and Horsens.

Previously the private ports (often power plant ports or refinery ports) could only load or unload goods belonging to the port owner. Effective January 1, 2004, a new issue in the Port Act decided that these ports might enter in general competition with a notification to the Ministry of Transport. In return, they have obligations to receive ships. Ports with obligation to receive ships are tax free concerning the income, given the surplus is used for the port or the works. This does not, however, include normal interest from invested capital. These conditions are fulfilled even when a port carries out an activity beyond the purpose, provided these activities take place within a subsidiary liable to tax.

Table 2-132: Schematic illustration of organisation and allowed services

Form of organisation \ Tasks	Establishing and operating port infrastructure	Cranes and warehouses	Port related operations	Ship related assistance services
Municipal port	+	-	-	-
State port	+	+	-	-
Municipal self-ruling port	+	+	±	±
Municipal joint-stock port	+	+	+	±
Privately owned port	+	+	+	+

± Only ports with grandfather rights (legislative interim regulations for certain ports)

In ports where port related operations, for instance, are not allowed the tasks are carried out solely by private firms under normal competition conditions. In other cases, both port and private firms carry out the tasks according to the local physical possibilities.

In 2003 Danmarks Statistik have registered 121 Danish ports with a total freight turnover of 103,954 million tons. 82 % was transported between Danish ports and foreign ports, and 18 % was transported between Danish ports. 91,933 million tons or 88 % of the total freight turnover was carried out in 27 ports, according to the table below. When ruling out the many ports organised as municipal ports, but having very little freight turnover, and therefore not

included in the regular traffic port system, there is no public financing of port operation in Denmark. On the other hand all open Ports have the obligation to receive ships space permitting.

A small part of the 27 ports are integrated in other not traffic related companies and carry out (almost) only port services for these companies. This applies to 4 power plant ports, 1 oil port and 1 cement port. Hence these ports have been excluded from the following analysis, although two of the electricity ports are open ports with obligation to receive ships. Of the remaining 21 ports 1 shows no account information, 1 is a state port where other account principles apply and 2 ports and port facilities, situated in connection with another port are attached to a ferry operator and consequently they have their own independent accounts only to a certain extent. Hence parts of the analyses include 19 ports and other ports include only 17 ports.

Table 2-133: Freight turnover and organisation form in the 27 largest ports 2003

Nr.	Port	Organisation 1)	Goods 1000
1	Fredericia Havn	KAS	16.513
2	Århus Havn	KS	9.983
3	Statoil-havnen	PAS	8.342
4	Københavns Havn	SAS	6.769
5	Helsingør Havn/Scandlines lejer	S (i 2004)/PAS-M	4.247
6	Rødby Færgehavn	PAS-M	4.632
7	Esbjerg Havn	KS	4.119
8	Kalundborg Havn	KS	3.514
9	Aalborg Portland	PAS	2.760
10	Frederikshavn Havn	KS	2.913
11	Enstedværket	PAS-M	7.630
12	Aalborg Havn	KAS	2.756
13	Asnæsværket	PAS-M	1.853
14	Odense Havn	KS	1.930
15	Rønne Havn	KS	1.414
16	Kolding Havn	KS	1.097
17	Aabenraa Havn	KS	1.333
18	Gedser Havn	PAS-M	1.111
19	Studstrupværket	PAS	1.375
20	Grenå Havn	KAS	1.024
21	Hirtshals Havn	KS	1.186
22	Randers Havn	KS	883
23	Køge Havn	KS	1.362
24	Vejle Havn	KS	836
25	Nordjyllandsværket	PAS	1.106
26	Thyborøn Havn	KS	705
27	Horsens Havn 2)	KAS	540
	The 27 Ports		91.933
	121 Ports		103.954

Source: Statistiske Efterretninger 2003, nr. 17

- 1)KS = Municipal self-ruling port KAS = Municipal joint-stock port
PAS = Privately owned joint-stock (-M = obligations to receive ships)
SAS = State-owned joint-stock port S = State-owned port
- 2) The Horsens Havn figures are from 2002, less than 500,000 tons in 2003
- 3) Of this crude oil shipments account for 11,427 million tons.

2.15.2 WP 1a: Identification and description of systems for public financing of seaports in Denmark

As can be seen from 3.1 there is no public financing of seaports in Denmark in regard to ports with a goods turnover of 500.000 tons or more pro annum. Which is comprising ports under normal competition with each other.

2.15.3 WP 1b: Public financial data/flows for Port of Aarhus in the year 2003

The Port of Aarhus is a municipal self-ruling port ("*kommunalt eget selvstyrehavn*"), thus there is no public financial flows to terminal-related Infrastructures, Suprastructures, Operational Management or Legal Provisions. This means that the income of the Ports at least must cover expenses and investments. The principal responsibilities of the Port of Aarhus are construction and the operation of the harbour infrastructure for the turnover of goods, renting of areas and buildings to harbour relevant enterprises and the sale of shipping related services. The annual report of the Port gives just the information required as if it was a limited company or a joint-stock company thus it is not possible to structure income and expenses in the "relevant categories" named in the matrix boxes. The bottom line is though that there is no financial flow to or from public sources.

In 2003 the overall infrastructure dues were DKK 84,950 million, of which DKK 18,665 million were shipping dues (normally paid by ship owners) and DKK 66,285 million were wharfage dues (normally paid by cargo owners).

The rent for leased areas were DKK 57,764 million.

Service rendered (include pilotage, mooring, towage and crane service) were DKK 42,413 million.

Other operating income were DKK 20,370 million.

Thus total operating income were DKK 205,497 million.

Profit from primary operation DKK 57,606 million and profit after finance net DKK 29,740 million

Table 2-134: Public profit and Loss Account 2003 (1 Euro = DKK 7,50)

	DKK million	Euro million
Shipping dues	18,665	2,489
Wharfage dues	66,285	8,838
Total infrastructure	84,950	11,327
Rent for leased areas	57,764	7,702
Service rendered	42,413	5,655
Other operating income	20,370	2,716
Total operating income	205,497	27,400
Costs	147,891	19,719
Profit from primary operation	57,606	7,681
Finance net	27,866	3,716
Profit for the year	29,740	3,965

2.15.4 Financial flows from the port and vessel operators to the public sector

There is no financial flow from the port and vessel operators to the public sector as the Port is a municipal self-ruling port. It is an independent business, which is managed by the municipal council through a Board of Directors. The assets of the port must, pertaining to accounts, be kept separated from the assets of the municipality, and it is managed in a way that the income covers the expenses and investments. Within the determined framework the management is free to dispose of the means for building and operation, but the means may only be used for purposes that serve the interest of the port. The port must provide supra-structure such as cranes etc.

In the Port of Aarhus there are two private container terminal operators. The "Public" terminal operated by Aarhus Stevedorekompagni and the terminal operated by Maersk-Sealand. The details of the contracts between the Port and the to operators such as charging are not known as it is confidential for commercial reasons.

Although there are different charging systems for shipping dues as for wharfage which can be seen in the official "paper" tariff, the rebates are also confidential for commercial reasons. On average shipping dues paid in 2003 were DKK 0.31 (0.04 Euro) per GT and wharfage dues were DKK 6.64 (0.89 Euro) per metric ton.

2.16 Finland

2.16.1 Country and port reports for Finland

2.16.1.1 Description of port sector organisation for Finland

Most of Finland's present day ports are owned by municipalities (local government) and their mode of jurisdiction is based on local self-government. Most Finnish municipally owned ports are nowadays public utilities and they function as public commercial enterprises or corporations. Two of the main ports are city-owned limited companies. There are also industrial ports in Finland, which are, as their name implies, owned by the industry while serving primarily their owners. A public port can also function as a privately owned limited company in Finland. The legislation on the establishment or expansion of a privately owned public port includes, however, a permit procedure (a permit from the Government).

The number of Finnish ports with a yearly cargo turnover that exceeds 100 000 tonnes are as follows:

- (Local) government owned / privately operated; 27
- privately owned / privately operated; 12

In addition to these there are a number of smaller ports whose role in the international shipping is of minor importance.

There are only two written port acts in Finland: the one concerning municipal port regulations and traffic dues (955/1976) and the other one concerning private public ports (1156/1994). Both acts are quite limited by content. Other legislation concerning ports is dispersed. Ports are being operated more and more commercially. In Finland the legislation on other sectors of transport is considerably new and comprehensive compared to the legislation of port operations.

The State's role in port matters is rather limited. The Government delegates specific port matters to whichever Ministry has the requisite jurisdiction. As of 1983, the handling of general port matters has been under the jurisdiction of the Ministry of Transport and Communications.

Stevedoring firms have traditionally handled the physical movement of cargo, vessel loading and unloading, as well as terminal operations. Stevedoring firms have often advanced from several small companies into one single port operator. With a few exceptions, the present stevedoring firms in Finland are owned by the forest industry and shipping companies. Competition in providing cargo handling services in Finnish ports is increasing, but it is still typical to stevedoring services in most public ports that one stevedoring company has a monopoly or dominating market position. About 80 % of Finnish ports have such a situation. Reasons to this are e.g. small cargo flows in small ports and before mentioned long traditions and ownership bases. The owners produce also the main cargo flows for many ports. The trend seems to be that stevedoring firms operating in different ports but having the same owners are being united into bigger units. The freight forwarders act as the representatives of the cargo owners while the shipping agents acts as the representatives of the shipping companies. Companies that operate in ports also offer different auxiliary services.

Port infrastructure is built and maintained by the port owner, that is, by the port authority. The incurred costs are covered by port dues paid by the ports customers. The fixed structures and equipment (also including large ship-to-shore cranes) in the ports are generally owned (and their use charged) by the port authority. Privately owned stevedoring firms normally own all mobile cargo transfer and cargo handling equipment. In addition to port authorities, companies also build storage facilities.

The trend, though, is moving towards a landlord role for the port authorities, while private firms supply the port services. Thus the port authority concentrates more and more on maintenance and development of port infrastructure at the same time as the port operations are being outsourced or entrusted with the present companies. There may be a special fund for the investment needs of the port authority. However, in the end, the municipality is still responsible for the infrastructure investments of the port.

2.16.1.2 WP 1a: Identification and description of systems of public financing of seaports in Finland

2.16.1.2.1 Access Infrastructures

The State is responsible for financing, constructing and maintaining the land access and waterway connections to ports (outside the port area). This includes roads, rails, inland waterway connections, waterway channels etc. However the ports do also in certain cases take part in covering the costs incurred by the construction of traffic connections to ports.

2.16.1.2.2 Terminal-related Infrastructures and suprastructures

The overall port infrastructure (within the port area) is financed, built and maintained by the port authority. This includes:

- quays / docks
- roads, rails on the terminal
- terminal paving/surface finishing
- port/office buildings
- warehouses
- cranes

The fixed structures and equipment in a port are generally owned by the port authority. Stevedoring firms normally finance and own all mobile cargo transfer and cargo handling equipment. In addition to port authorities, enterprises using the port may also build their own storage facilities. Since the investment costs of ports are not distributed evenly each year, external funding is also needed. When the port functions as a commercial enterprise, the most usual form of additional funding is a loan which is organised by the owners and will be paid back by the port authority.

Naturally the stevedoring, forwarding and other logistics companies can finance and build their own terminals to the port area when renting the land area (normally for long time) from the municipal port authority.

Municipal public ports used altogether **about 82 million euros in year 2003** and **116 million euros in year 2004** to their development investments. The amount of investments has become higher in latest years because of the building of new port for Helsinki (Vuosaari). In the table 2-128 the investments and the shares of external financing in the Finnish sea ports are showed.

In addition, the stevedoring firms and other companies operating in these ports are estimated to invest in the ports nearly the same amount annually as the port authorities. There is no up-to-date clarification of the investments made in the private ports.

Table 2-135: The overall investments in the Finnish seaports in years 2003 and 2004.

investments 2003	1000 euros	%
Internally financed	78 716	96 %
external financial aid and financing shares	3 025	4 %
TOTAL	81 742	100 %
The share of Helsinki port	20 841	25 %
investments 2004	1000 euros	%
Internally financed	112 938	97 %
external financial aid and financing shares	3 549	3 %
TOTAL	116 487	100 %
The share of Helsinki port	49 986	43 %

Sources: Finnish Port Association, 2003-2004; The Port of Helsinki, Annual reports 2003-2004

In areas of high unemployment the national government has provided some aid to investment projects carried out by e.g. municipalities. This support, which aims to relieve the

negative effects caused by high unemployment, has also been granted to investments in port. The level of support has, however, been low.

The ports income consists of port dues paid by port users for port development, maintenance and services. Since the investment costs of ports are not distributed evenly each year, external funding is also needed. While the ports function as commercial entities (public enterprise, limited company) the most usual form of funding is borrowing on commercial terms from a bank or the owner of the port, i.e. the municipality.

2.16.1.2.3 Operational Management

There are no subsidies for operational management in the Finnish ports.

2.16.1.2.4 Legal Provisions

There are no direct subsidies. The companies in the port area pay normal value added tax, and they do not enjoy any privileges or tax benefits, whereas the port authority is a municipal body, so it is exempted from turnover tax, like other municipal instances. When organised as limited companies, however, the port authorities are treated as any other companies including the obligation to pay income taxes.

2.16.1.3 WP 1b: Financial data/flows of public money for Port of Helsinki in the year 2003

No public money involved, except for the construction of the port access infrastructure to the new Vuosaari harbour (outside the port area).

2.16.1.4 Financial flows from the port and vessel operators to the public sector

A port as a provider of municipal services differs from other municipal service providers in that it does not provide services only to the inhabitants of the municipality but also to its clients. The port income consists of payments and compensation for port infrastructure development and maintenance and port services. The public ports in Finland usually pay a share of their yearly operating profit to their owners, i.e. the municipalities.

In the years 2003 and 2004, the income distributions in the Finnish seaports were as showed in the tables 2-136 and 2-137.

Table 2-136: The income distribution in the Finnish ports in year 2003.

port incomes 2003	1000 euros	%	Paid by whom	Paid to whom
cargo charges (port fees for cargo)	83 657,70	41,3 %	shipping company	port authority
vessel charges (port fees for vessel)	34 931,20	17,2 %	shipping company	port authority
waste disposal charges (port fees for waste management)	2 493,30	1,2 %	shipping company	port authority
storage charges	7 881,30	3,9 %	stevedoring company, forwarding company	port authority
open storage charges	14 137,20	7,0 %	stevedoring company, forwarding company	port authority
crane charges	17 414,70	8,6 %	stevedoring company	port authority
vessel service charges	8 820,10	4,4 %	shipping company	port authority, private company
other charges	33 269,30	16,4 %	shipping company, other customers	port authority
TOTAL	202 604,80	100,0 %	-	-

Source: Finnish Port Association, 2003

Table 2-137. The income distribution in the Finnish ports in year 2004.

port incomes 2004	1000 euros	%	Paid by whom	Paid to whom
cargo charges (port fees for cargo)	89 218,70	41,6 %	shipping company	port authority
vessel charges (port fees for vessel)	35 106,40	16,4 %	shipping company	port authority
waste disposal charges (port fees for waste management)	2 608,40	1,2 %	shipping company	port authority
storage charges	9 808,30	4,6 %	stevedoring company, forwarding company	port authority
open storage charges	14 480,30	6,7 %	stevedoring company, forwarding company	port authority
crane charges	18 648,80	8,7 %	stevedoring company	port authority
vessel service charges	9 547,10	4,4 %	shipping company	port authority, private company
other charges	35 242,10	16,4 %		
TOTAL	214 660,10	100,0 %		

Source: Finnish Port Association, 2004

Naturally stevedoring companies, forwarders etc. charge shipping companies concerning the loading/unloading, handling, terminal, warehousing etc. services.

The building and maintenance of the sea channels along the Finnish coast is 100 % financed by fairway dues paid by the ships. Pilotage services (excl. traffic on the inland waterways) are financed 100 % by the pilotage fees paid by the visiting ships.

2.16.1.4.1 WP 2a: Payments from the terminal operator e.g. rents / leases

See previous 3.16.1.4., tables 2-136 and 2-137 storage charges, open storage charges, crane charges. The stevedoring, forwarding and other logistics companies can finance and build their own terminals to the port area when renting the land area (normally for long time) from the municipal port authority. Also the stevedoring companies pay for the service or use concerning fixed cranes etc. fixed equipments owned by the municipality port.

2.16.1.4.2 WP 2b: Payments from the vessel operator e.g. port charges/ dues from the vessel operator

The payments may be divided into two categories:

- 1) port fees under public law (which cover port maintenance works and port investments as well as costs of port "authority duties", such as statistics and treatment of dangerous goods
 - port fees for cargo, vessel, waste management, passengers
- 2) port service fees under private law
 - vessel traffic services (pilotage, towage, ice-breaking, mooring/release of vessels/sewage/water & electricity supply, 24-hour-service)
 - cargo handling services (storage, stowage, stevedoring, forwarding)

Towing and tug assistance is mandatory only in special circumstances. Ship generated waste discharge is normally mandatory

Fairway fees are imposed on commercial shipping in order to cover the costs of the construction of waterways and navigational aids, upkeep and maintenance incurred to the State.

Regarding pilotage (pilotage fee), the newly formed State Pilotage Enterprise has since the beginning of 2004 been responsible for the provision of this service. Previously the operation was handled by the Finnish Maritime Administration (FMA). The structure of the FMA has, however, recently been re-organised. A central goal of the organisational reform has been to separate the authority functions from the service production. Thus the FMA in its current form focuses on its authority responsibilities and on the ordering of services, in the case of pilotage from the State Pilotage Enterprise. The objective is also to gradually open up the market for services thus enabling other service providers to enter the market. However, in the first stage of this process other services than the pilotage services are planned to become opened to competition. These services include e.g. the icebreaking services along the coast of Finland.

There is, also however a possibility to receive a Pilotage Exemption Certificate (PEC). If the master of a vessel has been accepted by the FMA as a route pilot for a certain fairway then the vessel is not obliged to use a pilot. To become a route pilot it is necessary to have proven knowledge of the fairway in question as well as to be able to speak and understand Finnish or Swedish. For the pilotage within the port area only, the port administrations can also appoint pilots for this task. Navigational aids are mainly owned and operated by the FMA. Pilotage is mandatory for vessels bigger than a certain size and for vessels carrying dangerous cargo etc. The language requirement connected to the PEC:s is regarded as problematic by some actors.

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- Mr. Matti Aura, Director, Finnish Port Association
- Mr. Arto Isokääntä, Port of Helsinki

2.17 Malta

2.17.1 Foreword

This paper is divided into two parts:

- the first one describes the situation for financing the port infrastructure. The information provided will be integrated in the Workpackage I of the study entrusted by the Commission to the Consortium led by ISL (Task I a and Task I b);
- the second part of the document analyses the charging system of ports, in order to collect information to be integrated in the Workpackage II of the study (Task II a and Task II b).

2.17.2 WP1: Public financing of seaports in Malta

2.17.2.1 Task 1.a: Identification of system for public financing of seaports in Malta

Two are the most important Malta ports: Valletta, that is a multipurpose port and Marsaxlokk, a container transshipment hub port. The second one is part of the Freeport Zone, established in 1989 with the **Malta Freeport Act**.

The basic law regulating the ports of Malta is the **Malta Maritime Authority Act (1991)** that established a public body (Malta Maritime Authority - MMA) vested both with general authority powers and with control and planning functions. Nevertheless, the Malta Maritime Authority is not responsible for the administration of the Freeport areas, as these functions are entrusted to the Malta Freeport Corporation (MFC) in term of the Malta Freeport Act. Therefore, it is correct to state that the MFC acts as Port Authority of the Marsaxlokk terminals.

2.17.2.1.1 The Malta Maritime Authority (MMA)

The Maritime Malta Authority has been endowed with an initial capital (350.000 liri) and can obtain specific funds aimed at the realisation of port works. Apart from that, the MMA must cover its expenditures with its revenues. All the properties and undertakings owned by the Government at the moment when the MMA was created have been transferred to it by the State. The power to make regulation is reserved to the Ministry, after consultation with the MMA.

As a general rule, the functions of MMA functions include:

- the control of the efficient operation and further improvement of ports;
- the prevention and control of pollution of ports;
- the regulation of service providers ports (technical/nautical services included);
- the administration of the port areas ,
- the safety measures related to ports and shipping,
- the safe navigation imports and territorial waters;
- the dredging;

- the general promotion of Malta Ports.

The Malta Maritime Authority is also responsible for administering a centralised pool of port workers.

Regarding the Freeport zone, the MMA maintains the overall responsibility for the safety of navigation and pollution prevention control, while the administration of the Freeport area and the licensing of terminal operators thereat are entrusted to the Malta Freeport Corporation.

In all Malta Ports, pilot age is provided by licensed pilots grouped in the Malta Marine Pilot Cooperative society. The service is compulsory apart from particular exceptions. Mooring is provided by a cooperative (Mooring corps); the service is compulsory and self assistance is not admitted. Towage is provided by Tug Malta Company limited, whose shareholders are the Government and private interests. The providers of technical/nautical services enjoy exclusive rights.

The MMA is composed by not less than seven and not more than eleven members. The executive functions are delegated to not more than four Executive Directors, that form the Port Directorate. The latter includes the Harbour Master Office, which is responsible for the safe navigation in ports and territorial waters, the drawing up of navigational charts and the regulation of technical/nautical services.

The revenues of MMA are constituted by:

- dues, charges or fees levied on ships entering or leaving a port;
- dues, charges or fees levied on passengers, animals or cargo carried by any ship;
- dues, charges or fees for lighting, mooring, buoyage, anchorage or accostage.

2.17.2.1.2 The Malta freeport corporation

As already pointed out, the Malta Freeport Corporation is entrusted with the administration of the set of areas that constitute the Free Port. Therefore, it constitutes the Port Authority of the Port of Marsaxlokk and, indeed, is known as the “Freeport Authority”.

The Malta Freeport Corporation is a joint-stock company which is also entrusted with institutional tasks, in that it is responsible for administering the port areas, assigning them under licence to undertakings that wish to set up operations in the Free Port zone, inspecting the regularity of the operations carried out, liaising with the Maltese Government, etc. It is also responsible for the allocation of areas, spaces, factories, wharves and any other structure which may be available in the Freeport zone. The areas can only be assigned in temporary enfiteusis for not more than fifty years. The port areas, as public property, can neither be sold, nor be acquired by “positive prescription”.

The Malta Freeport Corporation has an autonomous balance-sheet and is responsible for the development of the Free Port of Malta and for the maintenance of its infrastructure. The terminal of Marsaxlokk is part of the Free Port Zone and it is managed by the Malta Freeport Terminal Ltd, under a licence from the Malta Freeport Corporation

The main objective of the Malta Freeport Corporation is the development of the Freeport area. To this purpose, it provides initial support to the undertakings located in the free area by participating to their capital share. When the new undertaking has consolidated its

position, it is policy of Malta Freeport Corporation to dismiss its capital share and to solely fulfil the role of Landlord Authority. According to this policy, in October 2004, the participation of MFC in the capital of Malta Freeport Terminals Ltd. was dismissed and the terminal was leased for a 30 year period to CMA-CGM.

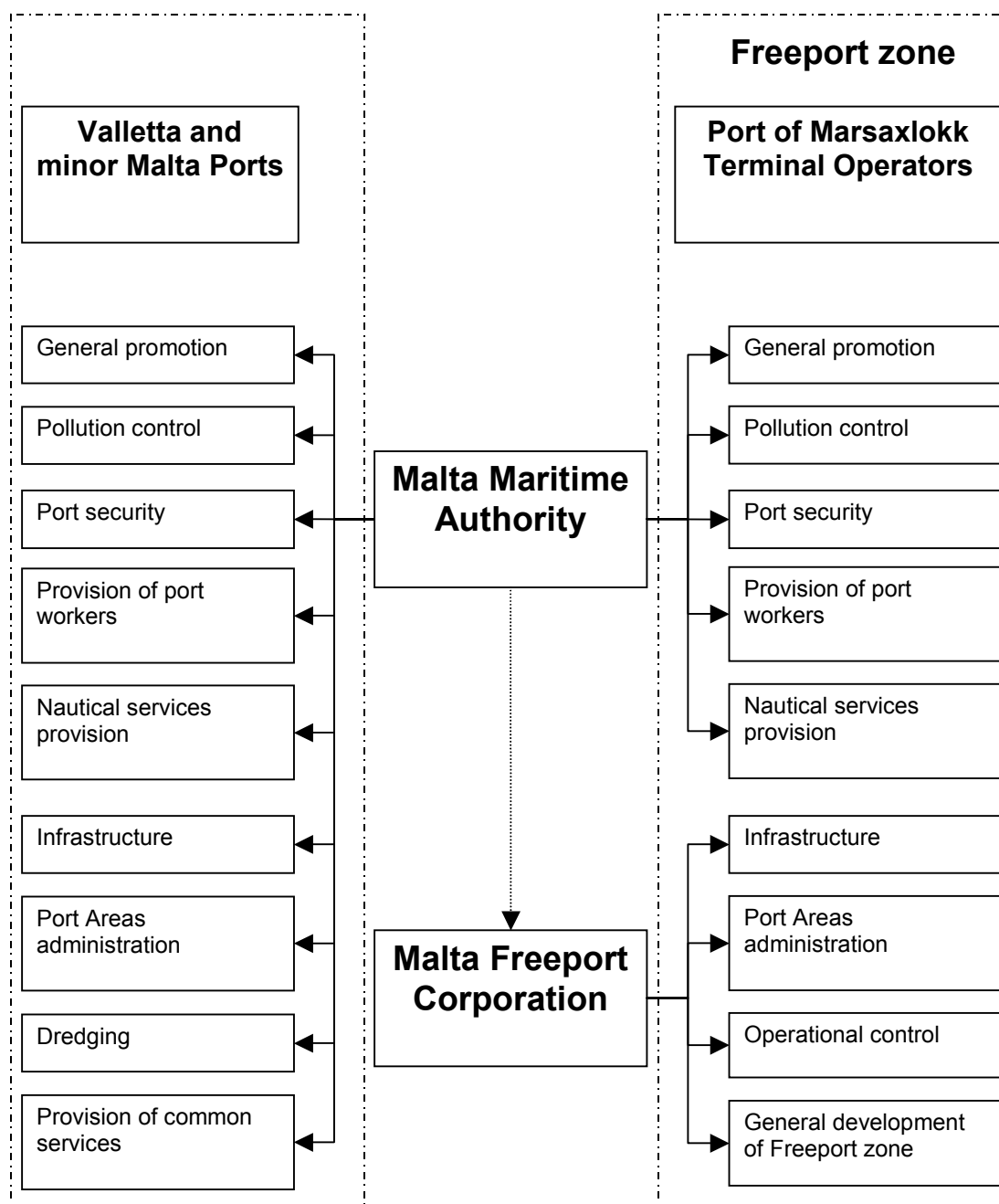
At present, Malta Freeport Corporation maintains a participation in the Oiltanking Malta Limited, which is a joint venture between Malta Freeport Corporation Limited controlling 30% of the shares and Oiltanking GmbH of Hamburg holding the remaining 70% shareholding. Oiltanking Malta Limited is an independent tank terminal, storing third parties' products without having any trading interests in oil products.

The Malta Freeport Terminal uses port workers from the common pool only for driving tug master and for unlashings operations; it uses its own personnel to handle gantry cranes and for all other operations.

The general set up of Malta ports is described in the following figure.

Fig. 2-11: Institutional set up of Malta ports

ISTITUTIONAL SET UP OF MALTA PORTS



2.17.2.2 Task 1 b: Public financing in the port of marsaxlokk

The free port zone is aimed at supporting the general development of the Malta economy and at promoting the location of the private undertakings within the Freeport area. Therefore, all the related activities have been carried out with a substantial contribution of public funds. Furthermore, the Freeport Corporation has hold shares in the capital of some Companies setting in the free zone. Various state aids were also assigned to the private undertakings in order to promote their location in the free-zone area.

After this initial stage, the Malta Freeport Corporation, pursues the aim of gradually dismissing its participations and focuses its activity on the landlord functions. As already mentioned, at present Malta Free Port Corporation has only a share participation in the capital of Oiltanking Malta Limited.

Furthermore, it is worthwhile to notice that, as a consequence of the entrance of Malta in EU, also the rules regarding the free-zone have been changed. Now, the private undertakings do not receive direct aids, but they are fundamentally eligible of reduced rates of tax and of investment tax credits.

The Malta Freeport Corporation receives by the Malta Government annual subventions aimed at repaying long-term loans incurred between years 1989 and 2004. These loans and bullet bonds were used to build the infrastructure and purchase equipment for the whole Freeport area.

The other sources of revenues of the Malta Freeport Corporation are:

- the rents paid by the lessees of the Freeport concessions,
- dues, charges or fees levied on passengers, animals or cargo carried by any ship;
- dues for accostage levied on ships (dues for lighting, mooring, buoyage, anchorage are directly paid to the Malta Maritime Authority),
- fees for services rendered to shippers and port operators, such as water supplies, electric power provision, use of tools, instruments, equipments, etc.

As a general principle, the management of Malta Freeport Corporation thinks it suitable a different consideration of the investments according to they being referred to basic or access infrastructure, or to terminal related infrastructure and supra structure. It is in fact considered correct that the basic infrastructure may be integrally financed by the public sector, while the terminal related infrastructure and the supra structure should be charged to their specific users. Nevertheless, the specific development of the Marsaxlokk Port has not been consistent with such a regulation, as the ports was completely realised with public funds in order to attract the private undertakings, which were not involved in the realisation of the port works.

Presently, only the realisation of big works (such as dikes and breakwaters) could benefit from state aids. In fact, according to the information provided by the Freeport Terminals Ltd, the investments recently realised or under way in the container terminal of Marsaxlokk have entirely been financed in the container Investments realised or under way in the following years.

Table 2-138: Investments realised or under way in Marsaxlokk terminal in 2003 and 2004

		2003 Lm	2004 Lm	Source
1.	Paving of junction quay for additional container ground slots	705,000	-	own funds
2.	Upgrading of quay cranes nos 12 and 13 to super post panamax	1,800,000	460,000	own funds
3.	Dredging at container basin	-	140,000	own funds
4.	Buiscar trailers	-	185,000	own funds
5.	MOL tractors	-	206,000	own funds
6.	SMV empty handlers	-	166,000	own funds
7.	Kalmar reach stackers	271,000	-	own funds
8.	New container yard	-	560,000	own funds
	Total	2,776,000	1,717,000	

The rents of the Freeport areas concession are regulated by individual long-term contracts (30 to 50 years), which include the fees and rents payable to Malta Freeport Corporation Ltd. There are not general rules: the rents are freely established by the Malta Freeport Corporation. In the case of Malta Freeport Terminals Ltd the rents are submitted to the approval of the Government (Government Privatisation Unit).

2.17.3 WP2: Charging practices of seaports in malta

2.17.3.1 Task II a – Task II b : Charging practices related to port and ship operators

The following table describes the financial flows between the Port Authorities of Malta and the private undertakings operating in the Marsaxlokk port.

Table 2-139: Summary of the financial flows whit in Marsaxlokk Port

Payment from:	Cause of the payment	Recipient of the payment	Final beneficiary
terminal operators	Rents paid for the grant of the port areas	Freeport Corporation	Freeport Corporation
	Rents of the use of equipment owned by the Free Port Corporation (if any)	Freeport Corporation	Freeport Corporation
	Compensation for services of general interest provided by Free Port Corporation (e.g. public lighting, cleaning of port areas, maintenance of common part of the port)	Freeport Corporation	Freeport Corporation
vessel operators	Dues paid for service provided by Malta Maritime Authority (e.g. public lighting, dues for buoyage and anchorage)	Malta Maritime Authority	Malta Maritime Authority
	Fee for passengers and animals embarked and disembarked ⁽¹⁾	Malta Maritime Authority	Malta Maritime Authority
	Compensation for services of general interest provided by Free Port Corporation (e.g. water supply, bunker)	Port undertakings located in Freeport area	Port undertakings located in Freeport area e
government	Investments tax credits)	Port undertakings located in Freeport area	Port undertakings located in Freeport area

2.18 Poland

2.18.1 Introduction and the authors

This paper constitutes final report created for the purpose of a study which focuses on the analysis of public financing and charging practices in the top 30 EU seaports. Main objective of this report is to gather comparable data for the most important the ports in the EU and prepare further detailed comparison between different institutional and financial networks influencing the seaports management

This report was prepared by Maritime Institute in Gdańsk in the Economics and Law Department. Involved team includes (in alphabetical order):

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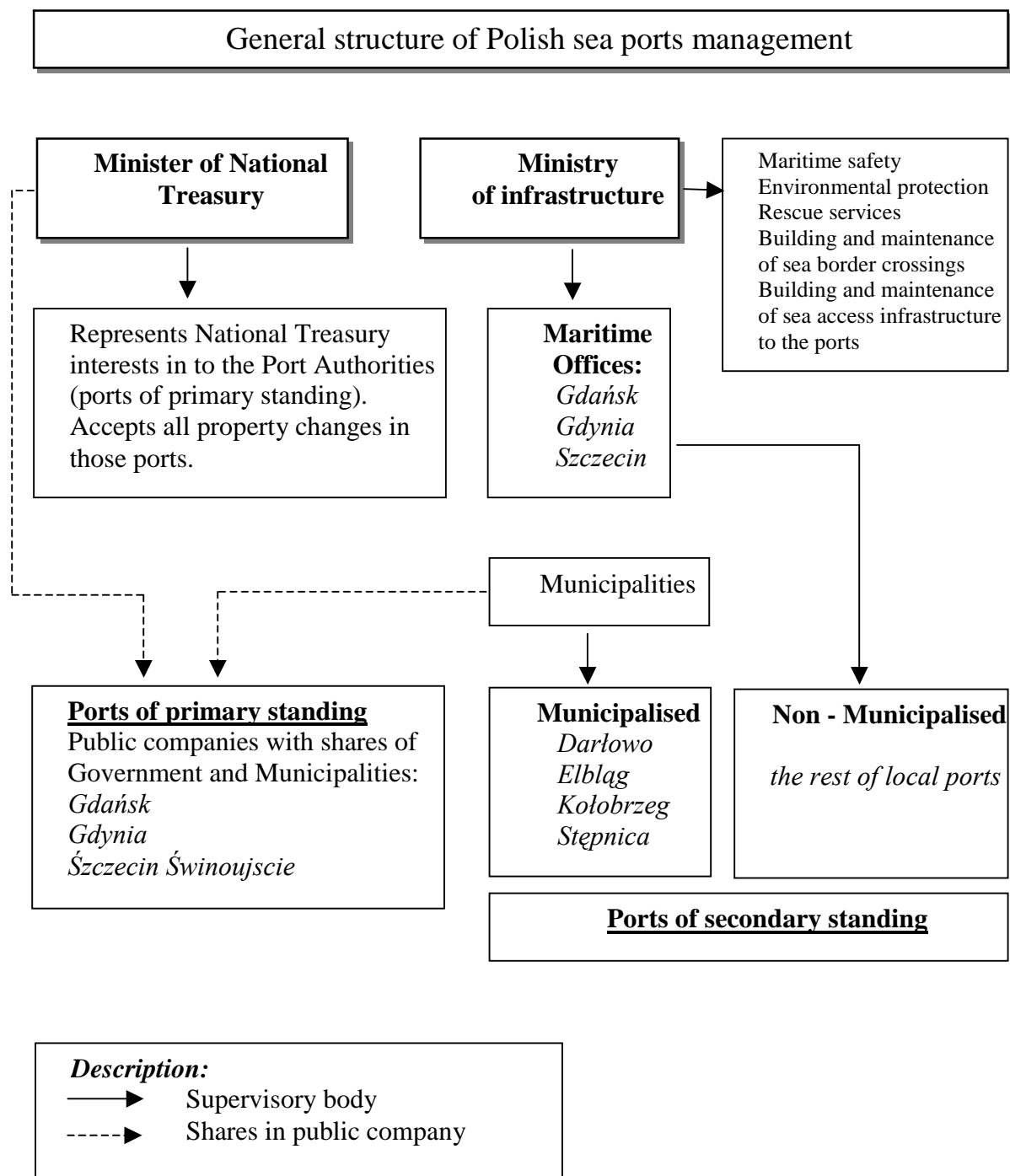
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2.18.2 General structure of Polish sea ports management and financing



2.18.3 Public financing and management structure in the port of Gdańsk

2.18.3.1 Governance

The port of Gdansk Authority S.A. (the Joint Stock Company) with its registered office in Gdańsk, is a commercial partnership established in 1998 and operates based on the provisions of the Act on Seaports and Harbours and the Code of Commercial Companies. In that capacity, the Company follows the tradition of all its predecessor entities that used to manage the port grounds in Gdańsk.

The Port Authority SA is a sole entity managing the port in Gdańsk – the port of primary importance to the national economy.

The remit of the Port of Gdańsk Authority SA includes, in particular :

- management of port land and infrastructure,
- programming and planning of port development,
- construction, development, maintenance and upgrading of port infrastructure,
- acquisition of properties for port development needs,
- rendering of services connected with use of port infrastructure,
- assurance of access to port reception facilities for wastes from vessels.

All other port services are rendered by privately-run companies.

2.18.3.2 Location and hydrographic conditions

Geographical and market-related location of the port of Gdańsk predisposes it to performing the role of significant link in the transportation chain connecting Nordic states with South European countries, chiefly those in the Adriatic and the Black Sea region.

The outer part of the port, the deepsea Northern Port can accommodate the largest vessels sailing the waters of the Baltic Sea. That section of the port is suited to servicing ships of up to 15 m draughts. The inner Port stretched along the bank of the river Vistula and the port canal can accommodate vessels of up to 225 m in length with up to 10,2 m draught. Both sections of the port maintain separate anchoring grounds and fairways.

The inner Port boasts a comprehensive range of terminals suited to handling: containerised cargo, passenger ferries and ro-ro vessels, passenger vehicles and citrus fruit, liquid and granulated sulphur or phosphorites.

Other quays, due to the facilities and infrastructure they offer, are universal use and enable the handling of general cargo as well as bulk cargo and oversize and heavy lifts. The Northern Port performs its operations on piers, quays and cargo handling jetties situated immediately on the water regions of the Gulf of Gdańsk. They are equipped with state-of-the-art terminals designed to handle energy raw materials such as liquid fuels, coal and liquefied gas.

2.18.3.3 Economic activity of the Gdańsk seaport**Table 2-140: Statement of income of the port of Gdańsk for 2003**

Category	2003
Income from production activity	1 253 705
Other operational incomes	374 664
Other operational costs	451 635
Operational activity income	1 176 734
Financial costs	440 310
Results from ordinary business activities	736 424
Extraordinary income and expenses	0
Net result	653 47

Table 2-141: Port investments responsibilities for port in Gdańsk

Category	Element	Responsibility
Land development	Development of new port areas	Port Authority Government
Maritime infrastructure	Capital dredging	Government Port Authority
	Sea locks, dams & exterior breakwaters	Government
	VTs/Radar	Government
	Light buoys & navigational aids	Government
Port infrastructure	Land reclamation	Port Authority Government
	Internal locks, Docks, quays, Light buoys & navigational aids, River berth & harbour basin dredging	Port Authority
	Main railways on the port area	State Railway
Port suprastructure	Pavements, Warehouses, sheds, Cranes and gantries, Link-spans, pontoons, Terminal and office buildings, Leasing/renting	Leased to private operators by Port Authority or build by private operators
Public utilities:	Fire fighting, Police, Pollution Control	Municipality/Port Authority/Government
Infrastructure links	Railways	State Railway company
	Roads in area, Canals in area	Port authority
	Tunnels & bridges in area	National Government Port Authority
Port maintenance	Maritime infrastructure maintenance	Port Authority
	Maintenance of port infrastructure and superstructure	Port Authority
Port services	Cargo handling	Private
	Technical-nautical services	Private

Table 2-142: Main public infrastructure investments in port of Gdańsk in 2003

Name of investment	Cost
Modernization of several quays, water pipeline system, energy supply system	5,25 mln €
Renovation of internal rail system, roads, buildings and stockpiles	1,8 mln €

Over the recent years, the Port of Gdansk has experienced a dynamic growth. This has been reflected in the constantly increasing volumes of cargo handling. Whilst a few years ago cargo throughput amounted to 17 million tonnes, already in 2003 that figure stood at some 21.7 million tonnes, in 2004 - some 23 million tonnes, and in 2005 a further growth in turnover is expected. The rapidly growing cargo handling volumes have been spurred mainly by the cargo-focused port development policy that translates into increased outlays on investment projects and repairs.

Poland's accession to the European Union has afforded a tremendous opportunity for the Port of Gdansk to step up its expansion processes as it entails, among other things, taking advantage of assistance funds offered by the European Union to co-finance projects implemented in its member states under the sustainable transport policy programme. As yet, the Port of Gdansk has already won an approval for the implementation of four investment projects comprising such issues as improvements on the port's land access infrastructure (Sectoral Operation Projects - Transport) at a total amount of EUR 31.5 million. The EU budget for the years 2007-2013 has also allowed for undertakings that are of profound consequence in terms of the transportation network development in Poland and, that result from the Port of Gdansk having been ranked as a vital multimodal junction within Trans-European Transport Corridor No. 6 with the Gdansk-Helsinki "motorway of the sea", the project of which is currently under way, as its northbound extension. In charge of the work of drawing up and implementing the project there is an international team with the leading roles played by Sweden, Finland, Poland and Germany.

Table 2-143: Projects accepted for realisation under SOP – Transport in 2004 - 2006

Name of the project	National Funding	ERDF
Access infrastructure to the Industrial Quay (also whole port access infrastructure elements)	4 750 000€	3 500 000€
Improvement in the accessibility to the Free Custom Area	9 500 000€	7 125 000€
Modernisation of the transport infrastructure in the Ferry Terminal Westerplatte	12 500 000€	9 350 000€

Port Authority is also encouraging the private investments, offering reduced lease charges and other incentives. Following over two-year long preliminary arrangements, the construction of a container terminal in the Port of Gdansk is now entering its crucial implementation phase. On April 25, at the seat of the Port of Gdansk Authority SA, the Vice-Presidents of the Port of Gdansk Authority SA along with the Members of the Board of DCT signed the relevant documents, thus enabling the investor and contractor of the work to take over the construction site of the container terminal in the Northern Port. President of the Port of Gdansk Authority SA and President of DCT Gdansk SA signed a long-term contract (for 30 years with possible extension by another 30 years) of lease of port land. The contract stipulates that the British investor will construct the largest deepsea container terminal in Poland on the land. The target throughput capacity in phase 1 will shape at 500 thousand TEU (of 20-foot containers), thus making it the largest deepsea container terminal in Poland. The outlays for the construction, initially estimated at USD 175 million, have now been revised by the investor and should amount to some EUR 150 million.

It is predicted that the first container carrier will call at the terminal in June 2006. Phase 1 of the construction should be completed in 20 months or so of the date of the commencement of construction work.

Considering the developments that are currently in progress, the Port of Gdansk Authority SA is effectively conducting the strategy aimed at the Port of Gdansk shaping up as a universal port and a friendly port with its standards complying with those applied worldwide.

2.18.4 Charging in the Gdansk seaport

2.18.4.1 Charging related to port/terminal operators

All charges related to land use, use of port provided facilities by private users are point of concern for agreements between private operators and port authorities. Charges paid by customers to private operators are fixed on market basis by operators. All supplies like electricity and heating are provided to the objects under the port authority management, and the charging system depends on many factors, like the consumption or time of building rental. Lease charges are one of the most importance sources of revenue for ports authorities. It is estimated, that leases provides roughly 1/3 of all revenues. In 2003 port authority in Gdańsk registered 184 agreements with tenants, among them there were 58 tenants involved directly with cargo handling and 58 tenants providing different services connected with previous group of activities.

2.18.4.2 Charging related to vessel operators

Charges for vessel operators are fixed by the national law. National law sets maximal level of this taxes which can't be exceed, and the charge level within specified range is set by port authorities alone.

Main charges are based on ship tonnage concern access of the port infrastructure: tonnage tax charged for each entering and leaving the port and also waste removal. For regular line ships there are special reduced charges established, on the basis of the regularity of the

weekly operations. Demurrage charges for the quay use are also based on the ship tonnage and depend of the purpose of the lay in port and its time.

Vessel operator may also use the IT infrastructure provided by the port authorities, against the payments. All charges are expressed and paid in Euros. All pilot services, towing and mooring services are carried by separate companies, according to its price rates. Excused from all charges and duties are vessels of NATO Treaty.

2.18.5 Gdańsk seaport financing structure detailed tables

Table 2-144: WP 1a: Table per Country (as percentages)

FINANCING AUTHORITY	National Government	Regional Government	Port Authority
RELEVANT CATEGORIES			
Access Infrastructures			
access channels (including disposal of dredging material)	100		
navigation aids	100		
turning basins	100		
breakwaters	100		
roads accessing the ports and in the ports but outside terminals	<i>Depending on the road category – national, regional or local</i>		
rails accessing the port and in the ports but outside terminals	100		
inland waterways	100		
Terminal-related infrastructures			
quays / docks			100
jetties			100
stocking yards			100
land reclamation			<i>Depending on the reclaimed land owner – PA/regional/ government</i>
Suprastructures			
roads and rail at the terminal			100
terminal paving / surface finishing			PA or private leaseholder
port / office buildings			PA or private leaseholder
warehouses			PA or private leaseholder
cranes			PA or private leaseholder
mobile equipment			PA or private leaseholder

Operational Management			N/A
only direct subsidies			N/A
Legal Provisions			N/A

Table 2-145: WP 1b: Table per Port (in Euro)

FINANCING AUTHORITY	National Government	Regional Government	Port Authority	Ports specifics
RELEVANT CATEGORIES				
Access Infrastructures	139 175	0	217 000	629 125
access channels (including disposal of dredging material)	0	0	78 750	
navigation aids	139 175	0	0	<i>World Bank loan</i> 629 125
turning basins	0	0	0	
breakwaters	0	0	29 750	
roads accessing the ports and in the ports but outside terminals	0	0	107 500	
rails accessing the port and in the ports but outside terminals	0	0	1 000	
inland waterways	0	0	0	
Terminal-related infrastructures	0	0	3 453 000	
quays / docks / jetties	0	0	1 693 250	
stocking yards	0	0	995 750	
land reclamation	0	0	0	
<i>Electricity, heating, water supply etc. networks*</i>	0	0	764 000	
Suprastructures	0	0	915 500	
roads and rail at the terminal	0	0	321 500	
terminal paving / surface finishing	0	0	0	
port / office buildings	0	0	282 250	
warehouses	0	0	122 000	
cranes	0	0	0	
mobile equipment	0	0	0	

Country reports for WP I and WP II

<i>Other suprastructure, not precisely specified</i>	0	0	189 750	
Other investments	150 000	0	359 750	
Operational Management**				
only direct subsidies				
Legal Provisions				

* Data which don't fit directly into the table, but with a significant value for the port, were provided in *italics*

** Blank field indicates no data available, "0" means no investments reported

Because detailed informations, according to the table scheme, were unavailable, payments from terminal operators and ship operators are presented in their general structure, as a percentage of Port Authority income in 2003.

**Table 2-146: Workpackage 2a: payments form the Terminal Operators and
Workpackage 2b: payments from the Ship Operators**

Category of payments	Net value (€)	Share in total income
Port charges (from vessel operators)	10 659 311	37,5%
Lease charges (terminal operators)	9 348 384	32,9%
Provision of electricity, IT services, heating etc. (vessel operators/ terminal operators)	5 830 840	20,55%
Charges for port infrastructure use (terminal operators)	1 882 542	6,65%

2.19 Spain

2.19.1 Governance Model of the Spanish port system and respective financing form

2.19.1.1 Spanish port system model

The organisational model of the Spanish port system results from the Law 48/2003⁹⁸ of November 2003 and, as it is intended to raise the competitiveness of the Spanish ports at national and international level, it enfoldes the economic and financial process of the provision of services and use of public domains.

Thus, the model articulates three essential public institutions, namely “Puertos del Estado” (State Ports), the “Autoridades Portuárias” (Port Authorities) and the “Fondo de Compensación” (Contribution Funds), envisaging the achievement of following aims:

- autonomy of economic and financial management of the public port entities;
- self-financing of the port system;
- optimisation of the economic and financial performance;
- solidarity among the public port entities;
- the right of free setting of tariffs;
- improvement of the competitiveness of the public ports;
- promotion of the participation of private interests on financing and managing public port assets, in particular through the award of concessions for the provision of services or use of port public domain areas. This award implies however, that concessionaires have to finance and provide infrastructures and installations, as required by respective activities.

The model presents, today, a growing interaction between public and private initiatives, whereby the last one is increasingly assuming the provision of port services and the development of non-commercial port activities. Nevertheless, the intervention of the Spanish State is still essential, especially through the Ministry for Public Works and Economic Development.

The Spanish ports are of type Landlord.

⁹⁸ BOE N° 284 Jueves 27 de Noviembre, Madrid

The public entity “Puertos del Estado” depends of the General State Administration (Ministerio de Fomento , Ministry for Economic Development), controls 27 ports and is responsible for the preparation, in straight cooperation with the Port Authorities, of the strategic plans of the port system, annual operational and capital budgets of public ports and of the pluri-annual consolidated budget program of the State port system. This activity is carried out according to the budget policy orientations of the Government, represented by the Ministry for Economic Development.

It is, thus, the entity “Puertos del Estado” which establishes the general management objectives for the port system, and which makes the internal control of the ports by using specific plans. The aim of the control is to assure the safety of assets, the reliability of the information received from the ports, as well as the accomplishment of its orientations.

The port authorities are also public entities, but of private right, with own legal status and patrimony, having the function of port supply side service leaders. Managing the public ports, the Port Authorities have the duty, on one hand, to prepare the master plans of the respective ports, which represent an essential tool for forecasting investments in infrastructures, as well as the annual economic and financial plans. On the other hand, it is also a function of the Port Authorities to approve the yearly budgets and the pluri-annual budget program of respective ports by adjusting the economic and financial forecasts of their plans to the general management goals established by “Puertos del Estado”.

The “Comunidades Autónomas”, Autonomous Communities, by appointing the President of the Board and having the majority at the Board of Port Authorities, have a relevant importance in the management of Port Authorities. For this reason, the model of relationship between “Puertos del Estado” and Port Authorities articulates the coordination between the General Spanish State Administration and the Autonomous Communities.

The Contribution Funds, “Fondo de Compensación Interportuario”, is a state entity managed by “Puertos del Estado”. It represents an element of inter-port solidarity and assures the self-financing of the public port system, potentiating the loyal competition between state ports by promoting:

- the adjustment, by means of a contribution and distribution system, of the resources raised by each Port Authority to the existing differences of receipts and expenditures structure of each port. It is about the conditions resulting from the different competition situations of the ports, their features or limitations of their influence areas or the specificity of their traffics;
- a sustainable development of port activity in all ports of public interest;
- the improvement of road and rail infrastructures accessing the ports;

- the technological development of the port sector.

2.19.1.2 Financing model of the port system

2.19.1.2.1 Economic resources of “Puertos del Estado”

The resources, according to the Law 48/2003⁹⁹, result from the following sources:

- product and rent of its assets, as well as income resulting from the alienation of own assets;
- 4% of receipts related to fees charged by the Port Authorities. This value is reduced to 2% when it is the case of insular regions of the Balearic Islands, Canaries Islands, Ceuta and Melilla;
- income raised through its activities;
- contributions received from the “Fondo de Compensación Interportuaria”;
- income from the State Budget and Budgets of other public entities;
- aids and subventions from any kind of source;
- credits, loans or other financial operations performed;
- donations or other contributions from private entities;
- other income, as long as in the scope of the Law.

2.19.1.2.2 Economic resources of the Port Authorities

The resources, according to the Law, are the following:

- product and rent of its assets and income resulting from the alienation of own assets;
- port taxes¹⁰⁰, in other words taxes charged for private use of the port public domain¹⁰¹ (for example concessions or licences), for private use of port buildings (tax on the ship, cargo) and use of public domain for carrying out commercial, industrial and service activities. And, on the

⁹⁹ Ley 48/2003 opcit

¹⁰⁰ Orden Fomento 818/2004 de 24 de Marzo

¹⁰¹ Ley 25/1998 de 13 de Julio

other hand, taxes for non-commercial services, general service taxes and taxes for services of maritime signalling¹⁰²;

- income of private right resources nature;
- contributions received from the “Fondo de Compensación Interportuaria” (subsidies);
- income from the State Budget or other Public Entities (subsidies);
- aids and subventions;
- credits, loans and income resulting from other financial operations performed;
- donations and other contributions from private entities;
- other income, as long as in the scope of the Law.

The concessions¹⁰³ are in general awarded for an extendable period of 15 up to years, depending on whether investment has been financed by concessionaires. In cases where concessionaires financed the quays referred period can reach 30 years.

Belongs to state port public domain or to the assets of the Port Authorities,

- a) public waters¹⁰⁴ belonging to port area;
- b) public land and installations affected to the port service;
- c) public land and installations acquired by the Port Authorities through expropriation and purchase or other form, provided that they are affected to the “Ministerio de Fomento”, Ministry for Economic Development;
- d) the works (infrastructures, superstructures) performed by the State or Port Authorities at the referred domain;
- e) the works performed by the holder of a port concession, when reverting to the Port Authority;
- f) land, works and installations of maritime navigation aid affected to the “Puerto del Estado” and to the Port Authorities;
- g) the water areas located at port’s service area.

The “Ministerio de Fomento” may disaffect all assets of the port’s public domain, which become useless to the purposes they have been intended for, remaining however still as part of the assets of the Port Authority. This entity may proceed to its alienation, in general, integrating the resulting amounts in its capital stock.

¹⁰² Orden de 28 de Abril de 1994

¹⁰³ Real Decreto 393/1996 de 01 de Marzo (B. O. E. de 16.08.96)

¹⁰⁴ Orden de 23 de Diciembre 1966 (B. O. E. de 27.01.67)

In what concerns taxes, their normative framework is composed, on the one hand by Law 48/2003 and, on the other hand by the Law of Taxes and Public Prices and by the General Tributary Law. The legal framework states that income from taxes meet the drive of coordination of the public interest transportation system and of the principle of financial self-sufficiency of the port system.

The cost-effectiveness drive of port system is fixed by Law and may be revised according to transportation policy criteria, to forecasts related to demand evolution and to the needs regarding investments.

Taxes of private use and valorisation of public domain are fixed, by Law, according to the market value.

The ruling, by law, of the taxes applying to the use of port installations envisages the promotion of private investments in infrastructures at the specialized terminals under concession contracts. This ruling includes some measures intended to promote the competitiveness and the self-financing of the Spanish ports. For this reason, the law introduces flexibility measures through coefficients and bonus award system. The correction coefficients allow to reduce the tax levels at ports with higher profitability and to increase it in others. The bonus system is useful to potentiate the role of Spanish ports at international level, as well as the intermodality. And it also allows that each Port Authority may grant benefits to strengthen and attract traffics, without however exceeding the limits fixed by law, as to promote better practices of environmental protection.

Table 2-147: Tax port bonus¹⁰⁵

Tax on Vessels	Cruising vessels	Between 20 and 30%
Tax on cargoes	In sea international transit	Up to 70%
	With origin in EU countries or that are discharged in Spain but with a EU country as final destination being nevertheless transported on a rolling equipment on board of a vessel	Up to 40%

¹⁰⁵ Orden Fomento 818/2004 opcit

Table 2-148: Tax bonus to boosting intermodality and to promote cabotage between EU ports

Tax on vessels	Vessels of regular services between EU ports	20%
	Ro-Ro vessels of regular services between EU ports	50%
Tax on passenge	Passenger and car ferries trading between EU ports	20%
Tax on cargoes	Cargoes having EU countries as origin	10%
	Cargoes having as origin or destination EU countries and transported by vessels of regular services	20%
	Goods with origin and destination in EU transported in regular service ro-ro vessels	40%
	Loaded or discharged cargoes entering or leaving EU countries by rail	20%

Some terminal operators criticize the system of maximum bonus, arguing that it damages port competitiveness¹⁰⁶.

Regarding tariffs¹⁰⁷, they are required by the Port Authorities on all commercial services provided under competition conditions with private sector. The tariffs have private prices nature and they are used to enable the achievement of the drive of ports self-financing. Their levels must not be lower than the cost of services to be provided and have to be approved by the Board of each Port Authority.

Tariffs for services provided by private sector are freely fixed by port operators, although there are maximum tariffs levels established by the Port Authorities for basic services, with exception to liquid bulks..

Concerning the tributary framework¹⁰⁸, the Port Authorities are submitted to the rule of State institutions, with no loss of benefiting from the partial tax exemption rule designed for private companies. Notwithstanding, income related to commercial activities is taxable as any of other economic activities.

¹⁰⁶ El Presidente del puerto de Barcelona, TYLOG 06.06.2005

¹⁰⁷ Orden de 30 de Julio 1998

¹⁰⁸ Ley Tributaria General

2.19.1.2.3 Economic resources of the “Fondo Compensación Interportuária”

The economic resources of the Funds result from the contributions of the Port Authorities and “Puertos del Estado”.

- a) The annual contributions of each Port Authority to the “Fondo de Compensación Interportuario” is determined by the aggregation of following items from to the balance sheet of previous year:
 - 80% of the income related to maritime signalling and
 - up to 12% of the income raised from the operations, excluding such related to maritime signalling
- b) The annual contributions of the entity “Puertos del Estado” are established by its “Consejo Rector” or Board of Directors, according to the funds as fixed in its budget and to the financial needs of “Fondo de Compensación Interportuária”.

The distribution committee of “Fondo de Compensación Interportuario” approves the distribution of the funds between “Puertos del Estado” and Port Authorities, based on following criteria:

- a) The 80% of income as referred to in a) of 2.19.1.2.3 are distributed amongst the Port Authorities, according to the number of lighthouses and other navigation aids existing in the respective geographical areas.
- b) The 12% of income mentioned in a) of 2.19.1.2.3 are used:
 - to co-financing investments in infrastructures in port areas not under concession, maritime navigation aids , as well as repair and maintenance of basic port infrastructures;
 - to financing expenses associated to the implementation of sanitation plans;
 - to co-financing improvements in road and rail infrastructures accessing the ports;
 - to co-financing actions or research and innovation programs benefiting the ports.

2.19.2 Public investments, responsibilities and financing sources

2.19.2.1 Investments and responsibilities

At the moment, almost 60% of the exports and 83% of the Spanish imports are carried out through the ports of public interest, which represents approx. 53% of foreign trade of Spain with the European Union and 96% with the rest of the world.

Like this, the Government acknowledges the strategic importance of the commercial ports of public interest for the development of the productive sector and the foreign trade of Spain. In particular, due to the fact that it is a country with a very peripheral location regarding most relevant European production and consumption centres.

This acknowledgement is reflected in the model of public port system, fitting the ports with a legal, economical, financial and tributary framework, which is quite consistent in terms of investment possibilities. Such framework, by ruling the economic and financial rule of the service supply and use of public domain, boosts the competitive position of the ports.

In view of this, the Spanish State, represented by the Central Government, as well as by the “Comunidades Autónomas” and through the articulation between Port Authorities, “Puertos del Estado” and “Fondo de Compensación”, has put forth a new port culture based on the global nature of the port supply side as well as on the concept of the port community, shared also by private interests. And, the Spanish State started to get involved directly and decisively in the promotion of the development strategies of the public interest ports and respective investment policies.

The aim is, in a way, to improve more and more the procedures and services of the ports in a constant search of formulas, which promote their competitiveness.

Land linked to port areas fall under responsibility of the State, as it is regarded as public domain.

In what concerns investments in maritime port access infrastructures, they fall under the responsibility of the Central Government and “Comunidades Autónomas”, whereby no tariffs are charged to the users.

However, in relation to the buoys and navigation aids, the responsibility is solely of the State, when they are located outside of the port area, being tariffs charged to the users, 80% of which reverting to the “Fondo de Compensación”.

In all these investments, the Government has been benefiting of support from the European Union (ERDF and Cohesion Fund).

In regard to the infrastructures of land access to the ports the responsibility is of the State. The railway infrastructures are of responsibility of Renfe, a State owned railway company, and Ferrocarriles de Generalitat owned by regional government.

Within port areas not under concession, Port Authorities are responsible for financing land infrastructures, benefiting nevertheless from support of the State by means of the “Fondo de Compensación” or even directly of the European Union (ERDF and Cohesion Fund). Within the areas under concession, the infrastructures fall under the responsibility of the concessionaires. Whenever investments in equipment and technological innovation occur in those areas, the State (Spanish Credit Institute) support by subsidizing respective port operators with approx. 50% of the interest rates charged by the commercial banks. The concessionaires, in general, do not benefit from other State aids¹⁰⁹, due to the fact that the majority of them are granted only to the industry sector, being port operations considered auxiliary transportation services.

¹⁰⁹ Terminales Marítimos de Bilbao, S.L. (interview on 24.05.2005)

The Port Authorities are responsible for the basic port infrastructures (terminal related infrastructures which include land reclamation, piers, and jetties).

The Superstructure, that involves paving of the terminals, warehouses, installations, cranes, container displacement equipment falls, as a rule, under the responsibility of the concessionaires. In the cases where an asset of the Port Authorities is used, a tariff is charged to the concessionaires.

2.19.2.2 Financing sources

2.19.2.2.1 WP1 Identification of public financing systems

Table 2-149: WPI Identification of public financing systems

Investments category	Elements	Responsibility	Investment coverage
1. Infrastructures			
1.1. Land and development	. Development of port areas	State (Ministerio de Fomento)	State (Ministerio de Fomento)
1.2. Port land access infrastructures	. Road, rail inland waterways connections	Port Authority E.U.	Port Authority E.U. (1.2)
1.3. Maritime port access infrastructures	. Breakwaters . Locks/fairways . Channels; dredging . Buoys . Navigation aids (lights, etc) . Maritime traffic control, VTS	Port Authority	Port Authority with support from State and E.U.
1.5. Port infrastructures	. Regeneration of land . Docks, quays. . Jetties . Signalling buoys. . Navigation aids . Dredging . Drainage nets . Water and power supply.	Port Authority	Port Authority with support from the State and E.U.
1.6. Connections in the port area	. Road, railway and fluvial accessibilities . Channels . Tunnels and ports	Port Authority Concessionaires Renfe and Ferrocarriles (railway)	Port Authority Concessionaires Renfe and Ferrocarriles (railway)
2. Port Superstructure	. Paving . Warehouses and yards . Cranes and gantry	Port Authority/ Concessionaires Concessionaires State	Port Authority with support from the State and E.U. Concessionaires State

Investments category	Elements	Responsibility	Investment coverage
	cranes . Pontoons, connection bridges . Administrative buildings . Terminals . Public buildings: . Fire brigades; . Police; customs; . Medical assistance; . Pollution control spillage . Information Systems	State State State Port Authority	State State State Port Authority with support of State and E.U.
3. Management			
3.1. Maintenance	. Maintenance of maritime infrastructures . Maintenance of port infrastructures and superstructures	State Port Authority Concessionaires	State Port Authority Concessionaires
3.2. Port Services	. Cargo handling. Technical-nautical services . Towage; . Mooring; . Pilotage; . Attraction; . Cleaning; . Safety; . Water supply; . Fuel supply; . Power supply	Concessionaires Licensed or authorised companies	Concessionaires Licensed or authorised companies
4. Legal provisions	Allowances, compensations subsidies to accrued capital	Port Authority	State/ Port Authority
5. Sundries	. Promotion of industrial areas . Accessibilities (connections with the hinterland)	State	State and E.U.

Table 2-150: WP 1a: Table Spain per country 2003

FINANCING AUTHORITY	National Government	Regional Government	E.U.	Port Authority	Terminal Operator
RELEVANT CATEGORIES					
Access Infrastructures					(**)
access channels (including disposal of dredging material)				100%	
navigation aids					
turning basins					
Breakwaters			100%		
roads accessing the ports and in the ports but outside terminals					
rails accessing the port and in the ports but outside terminals					
inland waterways					
Terminal-related infrastructures		2%	17%	55%	26%
quays / docks					
Jetties					
stacking yards					
land reclamation					
Suprastructures					
roads and rail at the terminal					
terminal paving / surface finishing					
port / office buildings					
Warehouses					
Cranes				79%	21%
mobile equipment					
Operational Management	100%				
only direct subsidies					
Legal Provisions	100%				
Others	9%			91%	

2.19.3 Organization of port services and charging practices at ports

2.19.3.1 Organization of port services

According to the law, the services at general interest ports are provided as an obligation of public service either by the Port Authorities or by private companies under concession, licensed or authorised. The services considered as basic ones are ruled by a free competition system, whereby the Port Authorities may limit the number of

service providers due accommodation reasons or to norms related to environmental protection.

Table 2-151: Port Services

Services	Service providers
1. Port	
1.1. General	
a) Organization, coordination and control of port's maritime and land	Port
b) Coordination and control of related to Basic commercial services and activities	Port Authority
c) Signalling, buoyage and other aids for approaching and accessing the interior	Autonomous Community corresponding central or
d) Installation and maintenance of buoy intended for time	Concession or licence
e) Surveillance services, security and	Respective
f) Lightning of common areas in land and	Port Authority or licensed
g) Cleaning of common areas in land and	Port Authority or licensed
h) Quay cleaning as a consequence of cargo storage and handling, as well leakages	Maritime
i) Emergency prevention and control prevention and extinction, contamination	Competent station
1.2. Basic	
a) Pilotage	Port
b) -nautical	
Towage	Licensed
Mooring	Licensed
Vessel	Licensed
c) Passenger Embark and	Licensed companies
Load and unload of luggage and	concessionaire
d) Handling of cargoes, transshipment, and carriage (at port's ²	Licensed companies part of economic interest (Stevedores)
e) Collection services for e raised by Solid waste collection	Licensed
Liquid waste	
2. Commercial	Authorised
a) Ship	
b) Forwarding	
c) Fish	
d) Fuel	
e) Sundry material	
f) Suppliers of mechanical equipment other	
g) Sundries	
3. Services of navigation aid (safe and sailing operations of	Port

¹ Real Decreto 393/1996 de 01 de Marzo (B.O .E. de 16.08.96)

² Orden de 15 de Abril 1987 (B.O .E. de 21.04.87)

2.19.3.2 WP2Charging Practices at port

2.19.3.2.1 WP2a Practices relatively to port operators

In the ports taxes are charged for the use of the docks, quays, areas for commercial activities, road and rail access in the port area, as well as port installations, loading and unloading operations, transshipment, as well as land and sea in transit cargoes.

As a matter of fact, service provision by third parties and the performance of commercial, industrial and other activities requiring the occupation of port's public domain, is subject to an authorization or license, whose income¹¹⁰ reverts to the Port Authorities. In general, that income is collected annually and has to be approved by the "Ministerio de Fomento".

In the case of authorizations or concessions, the basic tariff is fixed taking into account the extension of land and buildings occupation.

a) Land occupation

For land qualified for commercial, industrial and logistics use, the value is defined according to the market criteria having as reference the prices of respective municipalities. In the case of land for the terminals and other cargo handling installations, the reference prices is such of areas that could be taken as alternative ones.

In what concerns port areas used for urban development, the reference price for respective land takes into consideration the surrounding town zone urbanization's degree, the existing transport infrastructures and nodes, the existing maritime and land accessibilities, as well as its localization regarding port infrastructures.

b) Occupation of works and buildings:

In this case, the price (rent or lease) is determined:

- According to the value of occupied land and waters;
- According to the value of existing infrastructures, superstructures and installations, also taking into consideration the internal urbanization and paving, based on market and annual depreciation criteria.

Regarding concessions, the taxes¹¹¹ are yearly updated in 85% of the general consumer price variation index. However, during the validity of the concession contract and in each 15 years period, tax cannot exceed in more than 20% the value fixed at the concession contract. This limitation is, however, not applied in the case of areas for non-port activities.

¹¹⁰ Lei 62/1997 (B.O .E. de 30.12.1997)

¹¹¹ Lei 62/1997 ibidem

In the following situations, Port Authorities may grant bonus calculated according to the investments made by the private parties:

- When the tax payers invest in building new docks or in land regeneration projects, whereby the bonus should not exceed 50% of the tax value for waters spaces or land occupation;
- When the concession purpose is related to urban development and trading of warehousing and of logistics activities areas, the bonus must not exceed 40% of the taxes value for occupation of land;
- When the concession or authorization holder is an organization of public right performing a port activity, the bonus will be of 50% of the tax for land occupation in the port area;
- When the concession holder of a port terminal invests in the introduction of management and environmental audit systems, duly homologated, the bonus must not exceed 10% of the value of the tax for the occupation of land or water spaces in the port area;
- When the concession holder of a port terminal invests in the quality increase of the services performance, and has a certificate issued according to the norm UNE-EN 45011, the bonus must not exceed 5% of the tax value land and water space occupation in the port zone.

Port Authorities may also rent lifting equipments such as cranes and gantry-cranes etc., according to respective tariffs. In general, the Port Authorities raise charges for port use by ships and use of berth facilities, based respectively on port tariffs and quay tariffs.

2.19.3.2.2 WP2b Practices related to the ship operators

Ports charge taxes to ship operators, for the use of waters of port areas, works and installations allowing maritime access of ships to the docks and anchorage places, as well as for lay time of the ships at the ports.

The amount of those taxes depends on the use frequency of port facilities, the yearly number of calls and the lay period of the ships at port.

For the port access and lay period of the ships at berth places, the taxes are charged according the gross register tonnage of the ships and lay periods.

Depending on number of calls in the same port during the year, ship operator's benefit of tax reductions.

All taxes are, in general, charged to the port shipping agents, as they are acting in the port on behalf of ship operator.

Table 2-152: Summary of the financial flows between Port Authorities and private service providers

Payment from	Reason of payment	Receiver of payment	Final Beneficiary
1. Terminal Operators		Port Authority	Port Authority and State
	a) Rent of port areas		
	b) Rent of equipment to Port Authorities		
	c) Licenses and Authorizations		
	d) Concessions		
	e) Remuneration of general interest services (lighting, cleaning and maintenance of common areas)		
2. Ship operators		Ship port agents	Port Authority and State
	a) Taxes referring to entrance and sailing of ships of the port area (maritime signalling, pilotage)		
	b) Anchorage		
	c) Mooring and unmooring		
	d) Quay rent		
	e) Fuel supply		
	f) Water supply		
	g) Power supply		
	h) Collection of waste produced by the ship		
	i) Passengers embark and disembark		

2.19.4 Ports

2.19.4.1 Port of Bilbao

2.19.4.1.1 Description of port structures

The Port of Bilbao is managed by a Port Authority and is located in the Spanish North Coast, 10,7 nautical miles up Rio Nervion. The docks have an extension of 17 Km along the river, from Zorroza and Canal de Deusto until “Abra”¹¹².

The Port presents 5 well-defined dock areas namely:

- The area of Canal de Deusto and of Zorroza docks;
- The area of Santurce located in the external part of the port near Santurce secondary breakwater. It is the most dynamic area in terms of port activity;
- The area of Cierrana near Santurce, located on the new adjacent dock with a length of 747 m and a water depth of 21 m;
- The area of Punta Ceballos with plants for loading and unloading of liquid bulks;
- The area of Punta Lucero with installations for loading an unloading of crude oil and refined oil products.

The port of Bilbao has at its customers disposal 29 terminals devoted to all type of traffics. 9 are of liquid bulks, both oil, energetic products and agricultural products. Concerning these last ones, the Port of Bilbao is the Cantabrian one with the largest storage capacity.

In the so-called industrial area (Baia de Biscaia) a regasification and power production plant is being built.

The solid bulks have 5 terminals at the dock of Punta Sollana, for loading and unloading of goods such as pyrites, coal, scrap, ore and fertilizers.

That dock is also intended for industrial plants and has enough spatial reserves to accommodate maritime traffic service companies.

In the Santurce area there are 2 terminals for container cargo, 2 terminals with Ro-Ro ramps and 11 for conventional cargo, having the capacity to store, among others, woods, siderurgic products, paper and perishable products. Additionally, the port has 1 terminal for passenger traffic and 1 for fruits.

The port has 270 sqm of storage capacity and 30.000 sqm as bonded warehouses belonging to a state consortium in which the Port Authority holds shares.

¹¹² Bilbao Port - 2003

All docks have connections to the highways network and to the Santurce railway terminal which has been financed by “Ministero do Fomento” and concluded in 2002; it contributes for the raising of the productivity at the sea-land interface, being Bilbao today the port with the largest supply of railway services in Spain.

The hinterland of the Port of Bilbao extends to the País Vasco, Galiza, Astúrias, Castilla y León, la Rioja, Navarra, Aragón, covering all dry ports of Coslada in Madrid and Azuquera de Henares in Guadalajara, in which the Authority of the Port of Bilbao detains respectively 11,5% and 7% of capital stock. Besides those, the Port Authority holds shares in the Villafria dry port.

Due to the growing demand for spaces near the docks for the provision of logistic operations, the Port Authority is developing a warehousing and depot area (ZAD) in the dock area made from the sea, with an extension of 45.700 sqm, close to the trucks parking area and the railway station.

Bilbao’s competing ports are Valencia and Barcelona, being its main traffic the feeder one with origin/destination in Central Europe. In terms of importance, the Port of Bilbao is the 4th in Spain and the sole of the Cantábrico with relevant inter-modal traffic.

2.19.4.1.2 WP1b Investments and public financing

- a) In 2003 the major investments¹¹³ in the Port of Bilbao are linked to the building of new docks by making land from the sea, to extension of infrastructures and accrued areas for the localization of industries.

In 2003 port investments were financed by the Port Authority, European Union, port operators and by the industry.

- the European Union, through the Cohesion Fund, approved in December of 1998 an aid for the first phase of environmental regeneration of the river of Bilbao. The amount that should have been received in 2003 was only credited in 2004;
- however in 2003, the Cohesion Fund channelled to the Port of Bilbao an aid amounting to € 10,6 million of a total of € 17,7 million corresponding to the co-financing in 51,95% of the extension of dock no. 3 in “Abra”. In October of that same year, the European Union approved an aid of the Cohesion Fund of € 16,78 million, for covering 34,75% of the investment in the dock project AZ-1, within the scope of the extension of the port in “Outer Abra”. Respective amounts were however credited only as from April 2004;

¹¹³ Informe anual – Port of Bilbao Authority

- in 2003 the Port Authority invested € 29,9 million, mainly for the financing of the docks construction no. 3 for Ro-Ro traffic and AZ-1 for solid bulks in “Abra”;
 - regarding private investments, the port operator TMB - Terminales Maritimas de Bilbao, concessionary of the containers terminal in dock no. 2, invested € 28 million. In that project the operator benefited of an aid of the Spanish Credit Institute in terms of reduction on interest rate.
- b) In 2003 the Port Authority received € 1,9 million from the “Fondo de Compensación Portuaria”. And the subsidies to accrued capital were of € 977 thousand.
- c) During 2003 a cooperation agreement was made envisaging the urban regeneration of the port’s public domain area of the Zorrozaurre peninsula through the incorporation of the zone into the process of development of an economic, social and urbanistic project. It is an operation that, from the financial point of view, will represent a rather important financial aid to the Port Authority, considering the high value of the involved real estate.

Table 2-153: WP 1b: Table per Port Bilbao 2003

FINANCING AUTHORITY	National Government	Regional Government	EU	Port Authority	Terminal Operator
AMOUNT FOR 2003					
RELEVANT CATEGORIES					
Access Infrastructures					
Access channels (including disposal of dredging material)					
Navigation aids					
Turning basins					
Breakwaters					
Roads accessing the ports and in the ports but outside terminals					
Rails accessing the port and in the ports but outside terminals					
Inland waterways					
Terminal-related infrastructures			10 660 000	29 900 000	28 000 000
Quays / docks					
Jetties					
Stacking yards					
Land reclamation					
Superstructures					9 000 000
Roads and rail at the terminal					
Terminal paving / surface					

finishing					
Port / office buildings					
Warehouses					
Cranes					
Mobile equipment					
Operational Management	2 835 000				
Only direct subsidies					
Legal Provisions	3 725 000				
Others					

2.19.4.1.3 WP2 Payments Flows

The turnover¹¹⁴ for 2003 of the Port of Bilbao was € 54,35 million, that represent an increase of 4% over 2002. The operating costs increased only by 2%, producing an operational profit of € 13,3 million or 11% over previous year. In 2003 Port Authority had a financial profit of € 8 million, which was € 2,2 million better than in 2002, influenced by the effect of the sale, during 2002, of the land known as Bolintxas in Saturce (€25,2 million).

As a matter of fact, in 2003 the financial expenses resulted significantly reduced (20%) due to interest rates and depreciations. The financial profit was of € 13,3 million, 11% higher than during 2002.

2.19.4.1.3.1 WP2a Payments related to port operators

The payments¹¹⁵ regarding the port operators concern cargo handling, rented installations, concessions and authorizations, as well as renting of lifting equipment.

¹¹⁴ Bilbao Port Authority Balance 2003

¹¹⁵ Bilbao Port Authority ibidem

Table 2-154: WP 2a: Payments from the Terminal Operator Bilbao 2003

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	
Cargo dues	25 958 000
Cargo stacking	
Warehousing	521 000
Equipment dues	112 000
Other dues	
Pilotage dues	
<i>Concessions</i>	14 910 000
<i>Supplies</i>	
<i>Other Operation Revenues</i>	364 000

2.19.4.1.3.2 WP2b Payments to the ship operators

The payments¹¹⁶ regarding ship operators involve maritime signalling, pilot assistance, port taxes, sundry supplies and services provided to passengers and to sportive and recreation boats.

At Port of Bilbao tug and pilot assistance is compulsory for berthing at dangerous bulk cargo terminals. In the other cases, the master of the ship having been assessed by pilot will be sole responsible for ensuring safety throughout manoeuvres.

¹¹⁶ Bilbao Port Authority Balance 2003 Opcit

Table 2-155: WP 2b: Payments from Ship Operator Bilbao 2003

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
Cargo Revenues	
Port dues	9 364 000
Cargo dues	
Cargo stacking	
Warehousing	
Equipment dues	
Other dues	101 000
Concessions	
Supplies	769 000
Other Revenues	2 670 000

2.19.4.1.4 Traffic statistics

Table 2-156: Bilbao 2003 – Traffic Statistics (cargo figures in thousands of tonnes)

	2003	2002	Var. %
1. Number of vessels	3 485	3 672	5
G.R.T.	38 038	36 300	47
2. Number of TEUs	448 572	455 000	1
3. Passengers	112 000	137 000	-18
4. Cargoes loaded / unloaded	31 946	26 200	30
4.1 Oil products	14 825	12 640	17
4.2 Solid bulk	4 143	4 630	-11
4.3 Containerised cargo	4 768	4 661	16
4.4 General cargo	8 210	7 870	4

Source: Bilbao – Anuario Estadístico 2003 e 2002

2.19.4.2 Port of Barcelona

2.19.4.2.1 Description of port structures

A Port Authority manages the port of Barcelona, which is the main sea transport and service infrastructure of Catalonia, one of the four most dynamic regions of Europe. Its influence area spreads along South and Central Europe, as well as North Africa. The port of Barcelona is a logistics door for markets as distant as the Near East one and such of Iberian - American countries. It is a port whose continued growth – in cargoes and passengers – places it on top of the Mediterranean ports.

The port of Barcelona concentrates the most important logistics service supply structure of the Iberian Peninsula and South Europe. The articulation of all transport modes and structures (port, airport, highways, railway) in a radius of 5Km and its capacity to offer the best services to the transport and logistic sectors, convert the port in one of the main trading, transportation and distribution axles of the Mediterranean.

The port potentiates the use of the railway for the transportation of goods for medium and long distances. It offers railway regular services to several Spanish and other European destinations. Among such services it is of note the success of the lines connecting daily the port with the main Benelux terminals.

The connection of the port of Barcelona with the European railway hook through the high-speed network, will make it possible that unloaded goods reach the European destinations with a significant time reduction. This improvement will place the Port of Barcelona in a very competitive situation towards the ports of North Europe (Amsterdam, Bremen, Rotterdam) specially in what concerns traffics of Near East, North Africa and the Iberian -American countries.

The port, with a surface of 828,9 ha, a dock length of 20 km, as well as covered storage facilities of 134 404 m² and open facilities of 2 913 524 m², offers the following terminals:

- a) 9 Terminals for liquid bulk cargo
 - Dock 32 “Inflammables” and 22 “Contradic” for loading and unloading of refined oil products, oil, chemicals, natural gas and molasses.
- b) 6 Terminals for solid bulk cargo
 - Dock 22A “Contrade”, 22B , 22C, 23A “West” and 01 “ Adossat” for solid bulk cargo, where concrete, cereals, soyabeans, flour and potash are handled;
 - Dock 22B has multicellular silos and docks 26B and 23 A have industrial areas for flour and raw oil production.
- c) 1 Refer Terminal
 - Dock 19 “Sant Bertran” has 1 Refer Terminal with capacity for inter-communitarian cargo storage.

d) 1 Terminal for non-ferrous metals

- Dock 30 “Dársena” has 1 Terminal for loading and unloading of non-ferrous metals like aluminium, copper, nickel, lead and zinc.

e) 1 Terminal for coffee and cocoa

- Dock “Álvarez de la Campa” has 1 Terminal for loading and unloading of coffee and cocoa as bonded zone, the sole of the West Mediterranean with LIFFE (London International Financial Futures and Options Exchange) homologation.

f) 1 Terminal for fruits

- Dock 20C “Ponent” has 1 Terminal for fruits with a frozen storage warehouse of approx. 5.556 m².

g) 2 Terminals for cars

- Docks 30 “Dársena Sud” and 31 “Dársena Interior”, with a total area of 920.000m², of which 370.000 covered.

h) 3 Terminals for short sea traffic

- Docks 26 and 27 “Lepant”;
- Docks 19 “Barcelona” and 19 “Sant Bertran”;
- Dock 01.

i) 4 Terminals for containers and multiuse

- Dock 24 “Sud” with 46 ha and 1.362 m of berth possibilities;
- Docks 29 “Príncip d’Espanya” 03 Dársena Sud with 35,1 ha and 1.653 m of berth possibilities;
- Docks 20 and 21 “Costa” with 6,56 ha and 860 m of berth possibilities;
- Dock 01 with 9,77 ha and 450 m of berth possibilities.

j) 1 Terminal for passengers

The competing ports of Barcelona are rather Marseille, Genova, Rotterdam, Antwerp and Hamburg, than la Coruña, Cadiz and Santander.

2.19.4.2.2 WP1b Investments and public financing

In 2003 € 133 million were invested in the port. The investments: covered following objectives

Table 2-157: Investment by Objectives 2003 (Millions €)

Infrastructure and port capacity	86,20
Logistic activities and intermodality	0,50
Port Equip. and Installations	6,20
Port/City relation	0,00
Environmental actions	12,80
Aids to navigation	0,10
Fishing	0,10
Sport	0,00
Passengers	0,10
Others	27,00
Total	133,00

From the Cohesion Funds, the Port of Barcelona received in 2003 aids amounting € 36,8 million, as part of a non-refundable co-financing of 53% of the total investment of € 381,6 million related to the following main projects:

- Construction of sections 1 and 2 of the south breakwater;
- Construction of section 3 of the south breakwater;
- Construction of a new breakwater at the western side;
- Introduction of corrective measures at the coastal region.

In 2003 the Port Authority received €3,705 Million from “Fondo de compensación Portuaria”, and subsidies to accrued capital of € 1,548 Millions.

Table 2-158: WORKPACKAGE 1b port Barcelona 2003

FINANCING AUTHORITY	National Government	Regional Government	EU	Port Authority	Terminal Operator
AMOUNT FOR 2003					
RELEVANT CATEGORIES					
Access Infrastructures					
Access channels (including disposal of dredging material)				86 200 000	
Navigation aids					
Turning basins					
Breakwaters			36 800 000		
Roads accessing the ports and in the ports but outside terminals					
Rails accessing the port and in the ports but outside terminals					
Inland waterways					
Terminal-related infrastructures					
Quays / docks					15 500 000
Jetties					
Stacking yards					
Land reclamation					
Superstructures					
Roads and rail at the terminal					
Terminal paving / surface finishing					
Port / office buildings					
Warehouses					
Cranes				6 200 000	
Mobile equipment					
Operational Management	3 837 000				
Only direct subsidies					
Legal Provisions	1 152 000				
Others	3 705 000			27 800 000	

2.19.4.2.3 WP2 Payment Flows

In 2003 the Port Authority had a net result of approx € 27 millions. The operational activity led to a growth of 5% of the operating profit. As a matter of fact, the moderate

increase of 4% of the operating expenses, made it possible that the operating profit reached the amount of € 35.485 million.

During 2004 has been introduced in the framework of “Tasa para servicios generales” a new tax for covering Port Authority costs linked to general management and management of port safety.

2.19.4.2.3.1 WP2a Payments from port operators

The payments of the port operators concern the cargo handling, rent of buildings and installations, concessions and authorisations, as well as crane rents.

Table 2-159: WP 2a: Payments from the Terminal Operator Barcelona 2003

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	
Cargo dues	50 068 000
Cargo stacking	
Warehousing	3 264 000
Equipment dues	
Other dues	
<i>Concessions</i>	27 754 000
<i>Supplies</i>	
<i>Other Operation Revenues</i>	1 693 000

2.19.4.2.3.2 WP2b Payments from ship operators

The payments of ship operators involve maritime signalling, pilot assistance, port taxes, supplies, sundry services, passengers and sport and leisure crafts.

**Table 2-160: WORKPACKAGE 2b: Payments from the Ship Operator
Barcelona 2003**

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	19 116 000
Cargo dues	
Cargo stacking	
Warehousing	
Equipment dues	
Other dues	
<i>Concessions</i>	
<i>Supplies</i>	
<i>Other Revenues</i>	

2.19.4.2.3.3 Traffic statistics

Table 2-161: Barcelona 2003 – Traffic Statistics (cargo figures in thousands of tonnes)

	2003	2002	Var. %
1. Number of vessels	8 861	8 993	-2
G.R.T.	161 785	147 000	10
2. Number of TEUs	1 652 366	1 461 000	13
3. Passengers	1 869 967	1 300 000	43
4. Cargoes loaded / unloaded	50 121	50 192	-
4.1 Oil products	10 159	4 060	150
other liquid bulks			
4.2 Solid bulk	3 698	3 380	9
4.3 Containerised cargo	15 344	13 842	11
4.4 General cargo	20 920	28 910	-30

Source: Barcelona – Anuario Estadístico 2003 e 2002

2.19.4.3 Port of Algeciras

2.19.4.3.1 Description of the port structures

The port of the Bay of Algeciras has a geographical strategic location, as in an obligatory passage for the routes between Asia, Europe, Africa and America. It offers excellent natural conditions due to the bay, which represents a perfect natural refuge along 7500 ha, with best draughts.

The port of Algeciras is the first container traffic port of the Mediterranean. Nevertheless approx. 95% of that traffic is transshipment and uses the Maersk terminal, meaning that it results exclusively from the operational strategy operations of a global operator. In 2003 the import and export container traffic reached only of 150.000 Teus.

The port of the Bay of Algeciras has also a top ranking as dry and liquid bulk port in Spain.

It offers following terminals:

- a) 4 quays for ferries of regular service of the Gibraltar Strait. The transshipment of passengers is made through elevated platforms and passages connecting the quays with the passenger terminal.
- b) 1 main passenger terminal with an extension of 12.000 m², a commercial area of 7.900 m² and a parking area with capacity for 819 cars.
- c) 2 container terminals
 - Maersk terminal with an area of 686.132 m². The quay has 1.941 m of length and a depth between 14 and 16 m;
 - Terminal of Andalucia (TCA), which is the old Sealand terminal and has an area of 127.228 m², having 375 m of quay and 14,5 m depth.
- d) 3 ro-ro terminal.
 - Dock Ingeniero Castor;
 - Dock Juan Carlos (north side);
 - Dock Juan Carlos (south side).
- e) Several terminals of Cepsa for loading and unloading of oil products with several depths between 6 and 20 m. 60 m of deep is installed a buoy, which allows the loading and unloading of crude and refined products through 26 articulated arms.
- f) 1 terminal of Endesa for coal, with 1 discharging quay of 232 m of length and depths between 23 and 30 m, as well as a loading quay with 234 m of length and depths between 8 and 30m.

- h) 1 terminal for cement with 165 m of length and 10 m of depth. It has three places for discharging operations into pipes, which feed 7 silos with a storage capacity of 20500 metric tons.
- i) The Terminal of "Isla Verde exterior" is being built by Port Authority and according to plan it should become the Maersk container Terminal, in order to allow this company to offer services to ships with 10 000 Teus capacity. Thus, Maersk should leave its today's terminal, that would be used by TCA.

Taking into consideration the specificity of Algeciras as Hub, in the future the port has to compete with north African ports as Tanger Med, that will begin operations during 2007. Maersk has been invited to run the first container terminal of Tanger Med.

2.19.4.3.2 WP1b Investments and public financing

The investment volume¹¹⁷ planned for 2003 was of € 42,6 million. The major part of it or € 41 million is related to works at container and passenger terminals, with an especial focus for the construction of the quay adjacent to the breakwater of the project "Isla Verde Exterior".

The investments, per objectives, were the following:

Table 2-162: Investment by Objectives 2003 (Millions €)

Infrastructure and port capacity	38,3
Logistic activities and intermodality	0
Port Equip. and Installations	1,6
Port/City relation	0,1
Environmental actions	0
Aids to navigation	0
Fishing	0,1
Sport	0
Passengers	1,0
Others	1,5
Total	42,6

From above referred investment volume only € 41,971 Million have been carried out. And the most relevant works were the following:

- a) Port infrastructures of "Campamento" (San Roque) installations. Quays and yards, 1st phase, 2nd intervention.

¹¹⁷ Autoridad Portuaria de la Bahía de Algeciras - Dirección de Administración y Finanzas, Ejecución Presupuesto de Inversiones 2003

This project comprehends the second intervention of a project, which includes the construction of an important port infrastructure in Campamento.

During the 1st intervention, already concluded, a perimeter was built which protects the future yards.

For the 2nd intervention is foreseen the construction of an interior basin with 14,5m depth and 25 ha of yards.

- b) Quays and external yards to the protection dock close to Isla Verde. Quays and yards, 2nd phase, 2nd intervention.

In 2001 the yards contiguous to the protection dock were concluded.

In 2003 the protection pier was concluded. The quay has depths of 17 m and was conceived to be fitted with gantry cranes for last-generation container vessels. The total yards have 45,75 ha.

- c) Road and rail access to Isla Verde and Galera. Road infrastructure, 2nd phase, 3rd intervention.

This project has the objective to meet the next development of the container traffic resulting from the future terminal of Isla Verde Exterior.

In 2003 the Port Authority received € 2,170 Million from “Fondo de Compensación Portuaria, and €1,965 of subsidies to accrued capital.

Table 2-163: WP 1b: Port Algeciras 2003

FINANCING AUTHORITY	National Government	Regional Government	EU	Port Authority	Terminal Operator
AMOUNT FOR 2003					(**)
RELEVANT CATEGORIES					
Access Infrastructures					
Access channels (including disposal of dredging material)					
Navigation aids					
Turning basins					
Breakwaters					
Roads accessing the ports and in the ports but outside terminals					
Rails accessing the port and in the ports but outside terminals					
Inland waterways					
Terminal-related infrastructures		2 250 000	16 791 451	22 929 721	
Quays / docks					
Jetties					
Stacking yards					
Land reclamation					
Superstructures					
Roads and rail at the terminal					
Terminal paving / surface finishing					
Port / office buildings					
Warehouses					
Cranes					1 600 000
Mobile equipment					
Operational Management	4 135 000				
Only direct subsidies					
Legal Provisions	932 000				
Others	2 600 000				

2.19.4.3.3 WP2 Payment flow

The Port Authority had in 2003, a net result of de € 21,7 million, having the operation benefits increased approx. 16% towards 2003.¹¹⁸

2.19.4.3.3.1 WP2a Payments of the port operators

The payments of the port operators are related to cargo handling, installations rent, concessions and authorisations.

¹¹⁸ Autoridad Portuaria de la Bahía de Algeciras - Balance 2003

**Table 2-164: WORKPACKAGE 2a: Payments from the Terminal Operator
Algeciras 2003**

RELEVANT CATEGORIES	RECEIVING AUTHORITY	Amounts
<i>Cargo Revenues</i>		
Port dues		
Cargo dues		21 480 000
Cargo stacking		
Warehousing		100 000
Equipment dues		
Other dues		
<i>Concessions</i>		7 555 000
<i>Supplies</i>		
<i>Other Operation Revenues</i>		

2.19.4.3.3.2 WP2b Payments from the ship operators

The payments from ship operators concern the maritime signalling, pilot assistance, port taxes, supplies, sundry services, passengers and sports and leisure crafts.

**Table 2-165: WORKPACKAGE 2b: Payments from the Ship Operator
Algeciras 2003**

RECEIVING AUTHORITY	Amounts
RELEVANT CATEGORIES	
<i>Cargo Revenues</i>	
Port dues	21 973 000
Cargo dues	
Cargo stacking	
Warehousing	
Equipment dues	
Other dues	
Pilotage	277 000
<i>Concessions</i>	
<i>Supplies</i>	727 000
<i>Other Revenues</i>	1 911 000

2.19.4.3.4 Traffic Statistics

Table 2-166: Algeciras 2003 – Traffic Statistics (cargo figures in thousands of tonnes)

	2003	2002	Var. %
1. Number of vessels	20 729	19 572	6
G.R.T.	203 300.000	209 000	-
2. Number of TEUs	2 515 908	2 234 000	13
3. Passengers	4 549 889	4 428 000	3
4. Cargoes loaded / unloaded	85 685	67 534	-27
4.1 Oil products	21 462	20 000	7
others liquid bulks			
4.2 Solid bulk	2 820	2 840	-
4.3 Containerised cargo	29 033	25 404	14
4.4 General cargo	32 370	19 290	68

Source: Algeciras – Anuario Estadístico 2003 e 2002

2.19.5 Conclusions

Port Authorities as legal entities are entitled, upon State's authorisation, to seek for financing sources in the financial market to make investments of their responsibility. Those are however financially supported by the State, represented by Central Government ("Ministerio de Fomento"), "Puertos del Estado", "Fondo de Compensación" and Governments of the "Comunidades Autónomas", as well as by the European Union (i.e. Cohesion Fund). As a matter of fact, "Puertos del Estado" and "Fondo de Compensación" are State's institutions.

By taking into consideration the existing institutional articulation between all above referred State's institutions in what concerns the management of the Spanish ports, we conclude that the State supports in general the Port Authorities in:

- a) Property transfer involving land and installations;
- b) Port access infrastructures;
- c) Road and railway infrastructures, channels, tunnels within the perimeter of port areas not under concession contracts;
- d) Superstructures within port areas not under concession;
- e) Management, in particular, the maintenance of the maritime and port infrastructures and superstructure;
- f) Legal provisions;
- g) Grants of assets of public domain and others;
- h) Promotion of industrial areas which potentiate the competitiveness of ports (e.g. Industry sites, Freight Villages etc.) within and outside of the port areas, in this case with financing of the respective hinterland accessibilities.

The financing aid of the State (Central Government and "Comunidades Autónomas" assumes following forms:

- Grants (assets of public domain as land and installations);
- Compensation for operating losses;
- Provisions of capital;
- Foregoing profits;
- Reduction in or exemption of some tax relief.

An important financing source for maritime infrastructures, as well as for port infrastructures is the European Union (i.e. Cohesion Fund).

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2.20 Greece

2.20.1 Workpackage I

2.20.1.1 Description of port sector organisation for Greece

2.20.1.1.1 Introduction

Due to Greece's multi-island geography, its number of ports is significant. Also, the country's geographical location at the crossroads of three continents (Europe, Africa and Asia) makes the port sector's importance very significant both to the national economy and to the economies and trade of the Eastern Mediterranean regions.

With the possible exception of terminals dedicated to the needs of specific industrial enterprises, private or state-owned (mainly in the oil, cement, grain and ore businesses), to date all general-use ports in Greece are under the control of the state. The relevant overseeing Government ministry is the Ministry of Mercantile Marine (YEN), although for a variety of issues other ministries come into play, including the Ministry of Economy and Finance (for budget and price approval matters), the Ministry of Environment, Physical Planning and Public Works (for construction of major works), and the Ministry of the Aegean (for ports in the Aegean archipelago).

YEN has set up a four-tier port classification scheme. The country's top two state-controlled ports, Piraeus and Thessaloniki, are considered 'large trans-european ports'. Piraeus is about 3 times the size of Thessaloniki in terms of annual turnover. The second tier consists of 10 ports that are considered 'national ports'. These are Alexandroupoli, Elefsina, Igoumenitsa, Iraklio, Kavala, Kerkyra (Corfu), Lavrio, Patra, Rafina and Volos. The third tier consists of 53 ports that are considered 'municipal portuary fund' ports, and the fourth tier comprises all other ports (some 1,250 of them), which are considered 'peripheral ports'.

The geographical location of the 12 top-tier ports is shown in the figure below. Main gateways to the rest of the European Union via the Adriatic are the ports of Patra, Igoumenitsa and Kerkyra, whereas the ports of Thessaloniki, Kavala and Alexandroupoli are gateways to the provinces of Macedonia and Thrace and to Balkan countries north of Greece. The port of Volos serves mainly the region of Thessaly, whereas the ports of Piraeus, Rafina and Lavrio are main passenger ports to the Aegean islands. Elefsina is mainly a cargo port complementary to Piraeus. The port of Iraklio is the largest port of the island of Crete. Piraeus is by far Greece's largest port, handling over 20 million passengers per year, and also being a major container hub in the Eastern Mediterranean.

12 TOP-TIER PORTS



Source: YEN

The main activities of the 12 top-tier ports are summarised below.

TOP-TIER 12 PORTS MAIN ACTIVITIES

Port	Main activities		Port	Main activities
Piraeus	Passengers/Ro-Ro Containers Automobiles		Igoumenitsa	Passengers/Ro-Ro
Elefsina	Dry bulk cargo General cargo (non unitised)		Kavala	Passengers/Ro-Ro Dry bulk cargo
Thessaloniki	Dry bulk cargo Containers		Lavrio	Passengers/Ro-Ro
Volos	Dry bulk cargo Containers		Kerkyra (Corfu)	Passengers/Ro-Ro
Patra	Passengers/Ro-Ro		Alexandroupoli	Dry bulk cargo General cargo (non unitised)
Iraklio	Passengers/Ro-Ro Dry bulk cargo Containers		Rafina	Passengers/Ro-Ro

Source : YEN

For some 70 years up to 1999, the ports of Piraeus and Thessaloniki, officially known as Piraeus Port Authority (OLP) and Thessaloniki Port Authority (OLTh) respectively, were 'public law undertakings', an institutional model that could (and still can) be found in many state organisations, such as universities, hospitals, municipalities, etc. All other ports were modelled according to the so-called 'portuary fund' scheme, which was also a public law undertaking, but much simpler in structure than that of OLP and OLTh. Each of these could include more than one port, and generally referred to a specific municipal area.

In 1999, OLP and OLTh were converted into corporations (S.A.'s) wholly owned by the state. In 2001 the same model was adopted for all 10 'national ports'. At that time, 53 other 'portuary fund' ports came under the managerial jurisdiction of the respective local municipalities. In YEN 2001 established the General Secretariat of Ports and Ports Policy, tasked to oversee ports in a systematic and structured way, and formulate a national ports policy. Greece's top two ports are listed in the Athens Stock Exchange, OLTh as of 2001 and OLP as of 2003.

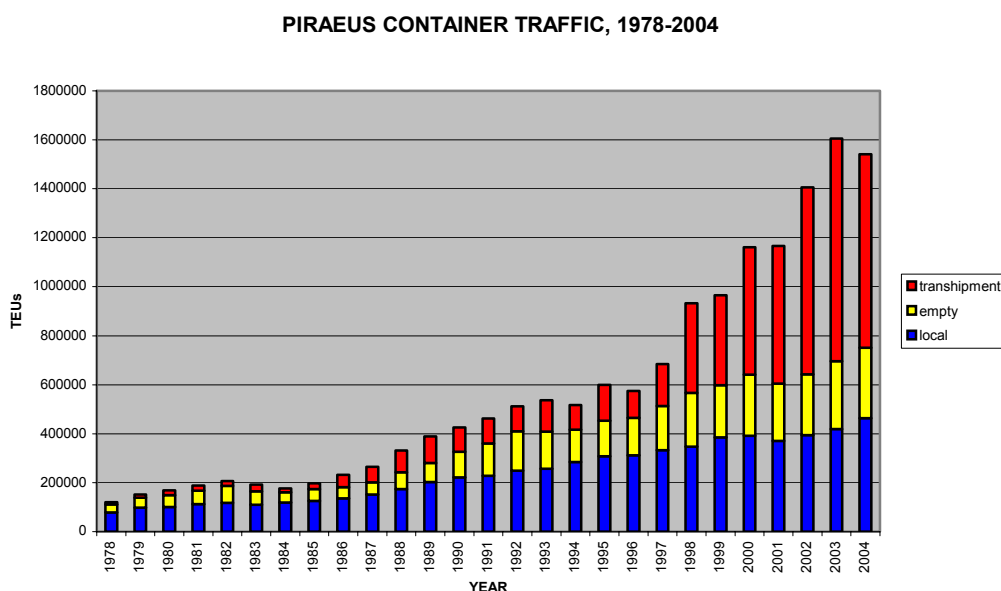
Although there have been attempts for the 12 top-tier ports to develop a coordinated strategy¹¹⁹, and although YEN oversees and coordinates their operation at a high level,

¹¹⁹ The Association of Greek Ports (ELIME) was established in 2002 but was abolished in 2005. Plans to replace it with another umbrella organisation are under way.

thus far they have been pretty much independent of one another. Competition among them is rather meagre, as each seems to have carved a special niche. Exceptions mainly concern Rafina and Lavrio as alternatives to Piraeus for coastal and cruise shipping (situation in which the dynamics are in favour of Lavrio). In the container sector, Piraeus's dominant position (1.6 million TEU vs. 0.27 million TEU of Thessaloniki in 2003) seems unchallenged domestically, at least for the foreseeable future. The port of Volos is potentially a container alternative to both Piraeus and Thessaloniki for cargoes to and from central Greece, but it is still too early to tell. The completion of a rail connection to OLP's container terminal (a project that would be completed in a few years) might expand OLP's hinterland to markets that Volos and even Thessaloniki serve. Last but not least, the completion of the Burgas-Alexandroupoli pipeline would see the latter port emerge as a major oil port in the region, and the completion of the 'Egnatia' east-west motorway axis (Igoumenitsa-Thessaloniki-Kavala-Alexandroupoli) would reinforce the role of Igoumenitsa as gateway of Adriatic Ro-ro traffic.

In contrast to the lack of serious domestic competition, some competition currently exists with foreign ports, mainly as regards container transshipment, a sector in which Piraeus competes mainly with Gioia Tauro, and secondarily with other ports such as Malta, Limassol, Damietta, and Port Said. Piraeus was established as a Med hub port in 1997, with the doubling of its container traffic in just 4 years (1996 to 2000) and continued growth afterwards, as shown in the figure below.

Fig. 2-12: Piraeus Container Traffic 1978-2004



Source: OLP

2.20.1.2 Foreign competition of the port of Thessaloniki lies mainly with Bulgarian and (to a lesser extent) Albanian ports, as alternative gateways to the Balkans hinterland.

The following table displays cargo throughput for a broader list of Greek ports in year 2002¹²⁰.

PORT THROUGHPUT

Port	Metric tons	Port	Metric tons
Piraeus	19,145,439	Politika	1,332,455
Elefsina	16,357,640	Paloukia Salaminos	1,235,598
Thessaloniki	14,197,280	Itea	1,117,430
Agii Theodori	11,824,708	Rodos	1,117,305
Volos	9,181,619	Souda Bay	933,173
Megara	7,626,745	Preveza	932,095
Rio	4,862,114	Korinth	924,716
Aliveri	3,652,794	Nissyros	853,312
Patras	3,399,034	Nafplio	829,685
Iraklio	3,235,758	Lavrio	824,527
Larymna	3,109,647	Hania	745,868
Milos	2,799,673	Sitia	687,377
Halkida	2,552,740	Aegina	655,725
Igoumenitsa	2,351,829	Kerkyra (Corfu)	642,432
Kavala	1,936,568	Naxos	581,165
Isthmia	1,782,876	Aspropirgos	579,609
Antikyra	1,664,085	Alexandroupoli	514,663
Antirrio	1,631,707	Rafina	96,772
Perama	1,418,586	Others	20,233,264
		Greek ports Total	147,568,013

Source: National Statistical Service of Greece (ESYE).

¹²⁰ This table includes the throughput of independent industrial port facilities (private or public) that operate within the corresponding port area. In that sense, the fact that Elefsina is ranked second may be misleading, as this is due to the presence of a independent industrial terminals in the Elefsina area (mainly oil), whose throughput does not count as that of the state-owned 'Elefsina Port Authority' (OLE).

Governance structure

The 'municipal portuary fund' governance structure is very simple, as the local municipalities who manage the respective ports carry out all relevant investments. Funds are provided from port dues and the state, and port employees are civil servants. The management of the port is exercised by the municipal authorities and operations are monitored by Coast Guard officers.

Of more interest is the governance structure of the 12 state-controlled top-tier ports, all of which are corporations in which the Greek state has a majority stake. In fact, for the 10 'national ports', that is, with the exception of Piraeus and Thessaloniki, each respective corporation has a single share, wholly owned by the state. For Piraeus and Thessaloniki the scheme is different, with OLP having 25,000,000 shares and OLTh 10,080,000 shares. With the listing of both ports in the Athens Stock Exchange, the Greek state has retained a majority stake in both ports, 74.14% and 74.27% respectively.

All 12 top-tier ports are 'service' ports, at least on paper, all basic services (of which more below) provided by port's personnel¹²¹. At a high level, the institutional regime of OLP and OLTh is very much the same, although lower-level differences do exist with respect to organisational structures, internal regulations, and business plans. The institutional regime of the 10 'national ports' draws from the OLP-OLTh scheme, being simpler as regards shareholder composition and organisational structure. All (former and current) civil servant personnel of Greek public ports are unionised under the Federation of Permanent Employees of Greek Ports (OMYLE), which, together with the Federation of Cargo Handlers of Greece (OFE), representing dockers, are the two main port labour unions in Greece. Lower-level unions also exist in all ports. Dockers work regulations vary among ports, with ports such as Piraeus and Thessaloniki having a strict employer-personnel relationship with their dockers workforce (which guarantees, among other things, a minimum salary), whereas others such as Elefsina having a more loose relationship (engaging dockers on an ad hoc basis).

It is important to state that the 12 top-tier ports have no formal relation with the municipalities in which they are located, as is prevalent in many other European ports. In fact, the facilities of the port of Piraeus are adjacent to as many as 5 local municipalities, including the city of Piraeus, and OLP is obliged by law to provide yearly support grants to these municipalities. Other than the provision that one seat is

¹²¹ An exception concerns the unofficial (yet very much active) presence of "shipping line agents" within terminals (mostly of OLP and OLTh), for the provision of supporting services to the shipping lines, such as lashing of containers, yard planning, logistical support, and others. For these services, the agents charge the shipping lines on top of what the port charges. The computerisation of OLP's container terminal in 2001 reduced drastically the role of the agents in the terminal. Another exception to the 'service' rule are piers leased to industrial operators (mainly in the drybulk and liquid bulk trades) for their own exclusive use. As none of these leases is to stevedoring companies or private port operators, thus far the 'landlord' model prevalent in other European countries is by and large absent in Greece.

reserved for a municipality representative on each port's corporate board, no other municipal control is exercised on these ports.

The same is true as regards the distinction between the commercial port entities, as described above, and harbour maritime authorities in Greece. Even though in English the name of all these corporate ports is 'Port Authority', this may be misleading, as all harbour maritime authority services come under the Hellenic Coast Guard, an independent agency of YEN. Indicative of this situation is the fact that the port of Piraeus harbour master is a Coast Guard officer who had a seat on OLP's board prior to corporatisation, but lost it in 1999.

As regards the spectrum of responsibilities and services rendered, the following table, which is relevant for OLP, is indicative.

Category	Element	Responsibility
Maritime Infrastructure	Fairways, dredging	OLP
	VTs, navigational aids	YEN
	Lighthouses, buoys	Ministry of Defence/national hydrographic service
Port Infrastructure	Docks, quays, jetties, piers, mooring points, graving docks	Greek state (ownership) OLP (maintenance)
Superstructure owned by port	Cranes, gantries, cargo handling vehicles, tools and shops, trucks, buses and other vehicles, port service vessels, floating docks, furniture, computer and other equipment, software	OLP
Superstructure owned by the state and leased to OLP	Pavements, warehouses, sheds, silos, terminal buildings, office buildings, parking garages, exhibition centre	OLP
Links to transport modes	Roads	Ministry of Environment, Physical Planning and Public Works City of Piraeus and other municipalities OLP
	Rail tracks	National Railway Organisation (OSE)
Maintenance	Port infrastructure & superstructure	OLP

	Maritime infrastructure	Greek state
Port services	Cargo handling, ship-dock	OLP ¹²²
	Cargo handling, dock-gate	OLP ¹²³
	Storage	OLP
	Barge services	OLP
	Trucking & distribution	Private
	Baggage handling	OLP
	Pilotage	YEN/pilotage service
	Towing	Private
	Mooring-unmooring	Private
	Waste reception	Private (contracted to OLP)
	Pollution control	Private (contracted to OLP) YEN/coast guard
	Cleaning & garbage removal	Private (contracted to OLP)
	Insect & mice control	Private (contracted to OLP)
	VTs	YEN/VTs service
	Customs control	Ministry of Finance/Customs service
	Port police	YEN/coast guard
	Port state inspections	YEN/coast guard
	Flag state inspections	YEN/coast guard
	Health & medical inspections	Prefecture of Piraeus
	Security	YEN/coast guard OLP
	Fire-fighting	Fire-fighting service
	Forwarding	Private
	Bunkering	Private
	Water supply	OLP Private
	Telephone supply	OLP
	Electricity supply	OLP
	Sewage disposal	OLP
	Passenger shuttle services	OLP
Ancillary services	Public parking	OLP City of Piraeus and other municipalities
	Parking garage of Exhibition Centre	OLP Private Ministry of Public Works ¹²⁴

¹²² Ships are allowed to load and unload under their own means under some circumstances.

¹²³ Private trucks are allowed to enter the terminal under some circumstances.

	Bus services	Athens Urban Transport Organisation (OASA)
	Exhibition Centre	OLP
	Rental of land and buildings to private enterprises within the port	OLP
	Ship repair dry-docking	OLP
	Ship repair services	Private

Sources: various

Note that the port of Piraeus includes a comprehensive ship repair zone at the Perama-Keratsini-Drapetsona-Kynosoura areas, run by private yards and shops which lease their facilities from OLP, and OLP manages 2 floating docks and 2 drydocks. The table for other ports is similar, although some of the services may be different.

2.20.1.3 WP 1a: Identification and description of systems for public financing of seaports in Greece

Financing of port infrastructure has traditionally been provided by port dues, charges for services rendered, rents of leased space, own funds of port corporations, state funds, and occasionally European Community funds (Cohesion Fund, 2nd and 3rd Community Support Frameworks, and others) and bank loans. The Operational Programme “Road Axes, Ports and Urban Development” (OP-RAPUD) of the General Secretariat of Public Works of the Ministry of Environment, Physical Planning and Public Works includes projects of a total budget of some 117 million euros for the ports of Lavrio, Volos, Mykonos, Souda, Patra and Nafplio (2002-2006). The European Community provides 50% funding for these projects, the rest being provided by the Greek state.

For Piraeus and Thessaloniki the provision of state and Community funds has been the exception rather than the rule. The rule is that these ports take care of all their costs and infrastructure and superstructure development by the system of tariffs they charge for their services. However, external funding has been occasionally provided for major projects. As an example, the completion of OLP’s container terminal Pier II (the largest of its two container piers) has been a 74 million euro project (1994-1998), and was financed in part by a grant of 13.8 million euros from the Cohesion Fund, a loan of 29.2 million euros from the European Investment Bank, and a grant of 7.9 million euros from the European Free Trade Association (EFTA). The Cohesion Fund also contributed to 80% of the 14.5 million euro budget of a new cruise pier in the Piraeus passenger port, completed in 2003. Last but not least, in late 1999 the Greek state gave OLP 35.21

¹²⁴ Can provide subsidy (see also next section).

million euros, registered as an equity capital increase, as its contribution to various OLP infrastructure projects.

From a financial flow perspective, the most significant changes for the country's two largest ports came (a) in 1999, when OLP and OLTh were transformed into corporations and then (b) in 2001, when legal adjustments were made to prepare for the listing of these two ports to the Athens Stock Exchange. Prior to 1999, it was difficult to precisely delineate the financial transactions between the two ports and the state, and the accounting system of both (following the state's 'public accounting' scheme) was rather cumbersome. The previous situation allowed for lack of transparency and transactional distortions between the ports and the state. The latter were bi-directional. On the one hand, the ports were exempt from income and other taxes and enjoyed a variety of additional privileges, such as monopoly of service and others. On the other hand, pensions to retired permanent personnel were paid out of the ports own funds, the same being true for medical benefits to all permanent personnel, active and retired (dockers being an exception). As the number of retired employees was higher than those active, and as this rising expenditure was close to 20% of the port's annual costs at the time, this represented a serious problem.

The law that converted OLP and OLTh into public corporations in 1999 corrected part of these problems, by exempting the ports from the obligation to pay pensions and medical benefits from their own funds. However, the law stipulated that both ports owed money to the pension funds for port employees retired prior to corporatisation, and that this debt should be settled from the proceedings of the eventual listings of the ports in the Athens Stock Exchange.

The present value of this debt was computed at 255 million euros for OLP, about twice the port's annual turnover, realising that such an amount would be very difficult to be raised, whatever method of port privatisation would be followed¹²⁵. OLTh had exactly the same problem, but on a smaller scale. This problem was solved by an adjustment to the law for both ports in 2001, by stipulating that the debt to the pension funds would be taken up entirely by the state, being covered only partially from the proceedings of the share sales. Thus, the proceedings of these share sales (54.23 million euros for OLP in 2003 and 15.22 million euros for OLTh in 2001) were not granted to the ports to finance their investment plans, but went wholly to Greek state coffers in both cases. However this does not preclude the use of the stock exchange as a source of port investment funds in the future.

The 1999 law stipulated that OLP and OLTh were to function as corporations (S.A.'s) with the service of the public interest as a goal, but functioning under the rules and criteria of private corporations. This stipulation is certainly not void of ambiguity, as the goal of public interest is not necessarily consistent with that of private profit

¹²⁵ Suffice it to realize that the cash that was eventually raised in OLP's Initial Public Offering (IPO) in 2003 was about 1/5 of OLP's debt to the pension funds.

maximisation, which is most pressing for companies listed in the stock exchange. This ambiguity has not been resolved to date and creates a non-uniform picture in port operation, as certain port sectors (and most notably the passenger port) seem to function as if societal criteria are most prevalent, while other sectors (most notably the container and car terminals) function like monopoly profit maximizing private operations.

For both ports, the income tax exemptions that existed prior to 1999 were abolished upon corporatisation. However, the corporate ports being 'whole successors' of their previous institutional regimes, they still retain many of the other privileges previously granted to them, monopoly of service being the most notable. In addition, and by contrast to any private corporation, OLP is exempt from municipal taxes and other dues to public agencies (such as courts, customs, and other). Several other exemptions and privileges of the prior regime still exist (for instance, property of the port cannot be seized as a result of legal disputes). Similar provisions pertain to OLTh. A quantification of the economic value of these exemptions is not available. In addition, ambiguities in the law have rendered some of these exemptions the subject of legal dispute with various parties, some of which are actually in the public sector!

In 2001, the law stipulated the signature of the so-called 'concession contract' between each of the corporate ports and the Greek state. Such a contract recognised each port corporation as the exclusive entity that could use and exploit the port's facilities, under prescribed terms and obligations, including the payment of a yearly concession fee. For OLP and OLTh the duration of the contract is 40 years and the fee is set at 1% of the port's adjusted gross turnover (excluding extraordinary income, previous years income and interest income) for the first three years and 2% afterwards. The concession contracts for OLP and OLTh were signed in 2002 and 2001 respectively.

It is important to state that as concessionaires, the corporate ports do not own the port infrastructure (such as docks, piers, quays, jetties, etc). Nor do they own a significant part of the port superstructure (such as pavements, buildings, sheds, etc). Such fixed assets were built and are being maintained using the ports' own funds. However, they belong to the Greek state, which leases them to the ports under the terms of the concession contract. For OLP, the official number of fixed assets leased to the port under the concession contract is 188. By contrast, OLP owns all the rest of the port superstructure, including vehicles, cranes, vessels and other equipment.

Due to the fact that the fixed assets leased to each port belong to the Greek state, their value does not appear in the port's books. This value is significant (much higher than the pension fund debt assumed by the state), and counts solely in favour of the owner of these assets, the Greek state. The concession contract for OLP and OLTh did not stipulate that the ports should receive a compensation from the Greek state for monies historically invested in these assets, but nevertheless mandates that maintenance of these assets is the responsibility of the ports themselves. This is tantamount to a financial flow from the ports to the state, flow which is estimated to be

at least as important as the yearly concession fee (see also later). Similar concession provisions hold for the other 10 'national ports'.

Indicative of the difficulty of delineating the transactions between ports and the Greek state (at least prior to 1999) has been the financing by OLP of part of the so-called 'peripheral highway', a major road project that links the passenger port in the City of Piraeus with the cargo port in Drapetsona-Keratsini-Perama. The project started in 1994 and is not finished yet. The part of the project that is handled by OLP has a budget of 42.55 million euros, with funding of 24.94 million euros from the EC's Cohesion Fund. As with other infrastructure assets, this highway is the property of the Greek state rather than OLP. However, in contrast to the other fixed assets leased to OLP, the highway has not been included in the concession contract among the assets that OLP can exclusively use and exploit (in fact, it is a public road with no tolls). This means that the Greek state has essentially used OLP as a conduit to partially finance the construction of one of its own highways, even though there may be ancillary (yet undocumented) benefits to OLP from the connection provided by the highway. In that sense, OLP is providing to the Greek state up to 17.61 million euros (42.55-24.94) of its own funds for this project.

A similar situation pertains to an unspecified number of other port area buildings, which historically have been built and maintained by OLP's own funds, until they were completely removed from OLP's jurisdiction when the concession contract was signed in 2002, by virtue of the fact that they housed other public agencies (such as Customs, Coast Guard, etc). For these buildings, OLP not only lost the corresponding rent (which was nominal but certainly not negligible), but also was deprived of any compensation for monies invested in these facilities over the years. The economic value of this indirect flow from OLP to the state is not available.

Two additional schemes of port infrastructure financing are contemplated, at least for Greece's top two ports. The first is self-financing by private investors or co-financing with them, along the Public-Private Partnership (PPP) model. OLP's relevant near-term investment plan (2003-2007) has a budget of about 240 million euros and lists a number of such projects, including terminals for cruise and coastal shipping, conversion of old warehouses into shopping centres, construction of a luxury hotel, and even the development of a monorail or similar transit system for the passenger port. Thus far this list does not include the container or car terminals, although the Secretary General for Ports and Ports Policy of YEN has recently announced that the superstructures of Greece's major ports would be leased to private operators in the future. This would be a major change in the country's institutional model for ports.

The first PPP project that became operational in Piraeus concerns an ancillary activity, a 700-space underground garage in front of OLP's Exhibition Centre, completed in 2004. OLP contributed 3.2 million euros to its 14.4 million euro budget. A subsidy of some 3 million euros from the state (Ministry of Public Works) is also available (roughly 4,100 euros per parking space), but so far has not been received.

The second financing scheme is a new 3 billion euro loan protocol recently signed between YEN and the European Investment Bank, and concerns future financing for all Greek ports. The protocol concerns the general terms of loans to be granted to ports for infrastructure and superstructure development. Loan applications would be evaluated and loans would be granted on a case-by-case basis, although an umbrella tender on which projects would be financed is due soon.

2.20.1.4 WP 1b: Public financial data/flows for Port of Piraeus in the year 2003

2003 was the year OLP was listed at the Athens Stock Exchange. Demand for its shares was very strong, reflecting the good financial position of the company, and the IPO was oversubscribed 16 times. 2003 was also the year the Piraeus container traffic reached the peak of about 1.6 million TEUs, a figure that would subsequently decline in 2004 and seems also to decline further in 2005.

Some aggregate traffic statistics are as follows.

TRAFFIC STATISTICS

	2002	2003
Container traffic (TEU)	1,404,939	1,605,135
Local (import+export)	393,695	419,348
Transshipment	762,433	909,220
Empty	248,811	276,567
Automobiles	321,445	335,072
Imports	276,351	270,694
Transshipment	45,094	64,378
Passengers	19,966,352	20,933,900
International	672,083	823,339
Domestic	19,294,269	20,110,661
Ship calls	27,902	26,333
Passenger ships	22,196	20,925
Cargo ships	5,706	5,408
Cargo (metric tons)	18,424,180	21,425,378
International general cargo (incl. unitised)	13,990,955	16,209,747
Domestic general cargo (incl. unitised)	4,019,423	4,769,810
International bulk cargo	413,802	445,821
Domestic bulk cargo	761,760	801,250

Source: OLP

The company's income statement for year 2003 is presented below.

INCOME STATEMENT (000 euros)

	2002	2003
Turnover	130,846	142,362
Minus: Cost of sales before depreciation	93,854	99,836
Gross profit, before depreciation	36,992	42,536
Plus: Other exploitation income	8,847	7,628
Total	45,839	50,154
Minus: Administration costs	12,803	12,761
Operating margin, before depreciation	33,036	37,393
Extraordinary income	266	232
Extraordinary profits	250	3
Previous years income	1,262	18.3
Minus: Extraordinary costs	13	1.4
Extraordinary losses	4	0.5
Previous years costs	462	656
Profits before interest, depreciation and taxes	34,335	36,988
Plus: Credit interest and related income	2,885	1,705
Minus: debit interest and related costs	976	655
Profits before depreciation and taxes	36,244	38,038
Minus: Depreciation	6,173	7,493
Profits before taxes	30,071	30,545
% of turnover	23%	21.46%
Minus: Income taxes for year and other taxes	10,683	10,836
Profits after taxes	19,388	19,709
Minus: Taxes for previous years tax audits	1,589	813
Net profits after taxes and previous years audits	17,799	18,896
% of turnover	13.6%	13,27%

Source: OLP

Personnel costs account for the bulk of the costs of provided services (>78%), as shown in the following table.

ANALYSIS OF COST OF PROVIDED SERVICES (including administration costs)

(000 euros)

	2002	2003
Personnel salaries	81,291	88,295
Third party personnel costs and benefits	12,681	11,232
Taxes and dues	414	215
Miscellaneous costs	8,417	8,805
Consumables	3,854	4,050
TOTAL	106,657	112,597

Source: OLP

Broken down by source of income, the situation is depicted below.

ANALYSIS OF INCOME SOURCE (000 euros)

	2002	2003
SERVICES TO PASSENGERS OF COASTAL AND CRUISE SHIPS	7,151	6,783
Passengers fees	5,168	4,669
Vehicles	1,983	2,114
HANDLING-RECEIPT-DELIVERY OF CARGO	94,700	111,149
Ship-dock cargo handling, local cargo	40,565	44,070
Ship-dock cargo handling, transhipped cargo	22,317	27,697
Storage	18,858	26,481
Dock-gate cargo handling	12,913	12,782
Rental of equipment for cargo handling jobs	47	119
SERVICES TO SHIPS	18,915	18,188
Berthing	9,827	11,472
Dry docks	4,314	2,417
Telephone, water, and electric supply	4,775	4,299
MISCELLANEOUS SERVICES	10,079	6,242
TOTAL	130,846	142,362

Source: OLP

The 'horizontal' structure of this table can be observed, making difficult the delineation of sources of income by port activity (e.g., container terminal, car terminal, passenger port, etc). Still, it can be seen that the bulk of income comes from cargo handling and storage (some 78% in 2003), which can be attributed mostly to the container terminal (and secondarily to the car terminal), whereas income from passenger port services is very low, even though the number of passenger ship calls is way above the number of cargo ship calls. The reason for this is the very low level of tariffs levied on passenger services, both for ships and for passengers and vehicles (see also last section).

This picture is to be contrasted with the distribution of investment funds across the port, as seen in the following table.

ANALYSIS OF INVESTMENT FUND USES (000 euros)

INVESTMENT CATEGORY	2002	2003
Buildings and other civil engineering works	2,199	35,558
Mechanical equipment	9,412	1,530
Transport means	2	1,933
Furniture and misc. equipment	522	900
Works in progress	11,926	221
TOTAL	24,061	40,142

Source: OLP

A striking difference between 2002 and 2003 can be observed, particularly as regards buildings and other civil engineering works. Much of the difference can be attributed to works associated with the passenger port preparation for the Athens 2004 Olympics, involving the berthing of 13 large cruise ships as floating hotels. This included a new water-sewage system, refurbishing of passenger terminals and land spaces, anti-terrorist measures, etc. The total investment cost of these works was estimated at 24.5 million euros, spread through 2004. In 2003 OLP received 11.4 million euros from the Greek state as partial funding for the Olympics works. The rationale here was that a part of these port infrastructure improvements would take place irrespective of the Olympics, and OLP should pay for these, whereas those strictly related to the Olympics should be paid for by the state. No other external financial support was received. Among other investments, the expansion of the car terminal (one of the most profitable sectors of the port, albeit much lower in revenue than the container terminal), whose total cost was estimated at 7.8 million (through 2004) is the most notable.

The amount paid for by OLP for the 'peripheral highway' project in 2003 is estimated at 0.49 million euros. As mentioned earlier, this fixed asset belongs to the Greek state

and is for general public use. Also, in 2003 OLP paid 2.14 million euros for the maintenance of all fixed assets belonging to the state and leased to OLP under the concession contract.

Due to the 2004 Olympics, the investment financial figures for 2003 are certainly not representative of the uses of funds for port infrastructure. However, this by no means deemphasizes the fact that investments in the Piraeus passenger port have a low return, and need to be cross-subsidised by more profitable port activities, such as the container and car terminals. The economic value of the cross-subsidy is not available, but the distortion created by it runs the risk of delaying investment plans for the latter. In fact, OLP's 2003 Annual Report announced the start of the expansion of Pier I of the container terminal in 2004, with an estimated cost of 35 million euros for infrastructure alone (plus 35 million for superstructure), of which the 3rd Community Support Programme would finance 30 million. But this work has only started in 2005 and no Community funding has been secured for it. In lieu of such funding, OLP recently signed a 35 million euro loan from the European Investment Bank for this project, in the context of the recent 3-billion euro loan protocol signed by YEN and the EIB. The expansion of Pier I would raise the capacity of OLP's container terminal from 1.6 to at least 2.1 million TEUs per year. Its construction schedule is 3 years and its prompt completion is considered of paramount importance if OLP is to remain competitive in the Mediterranean container market¹²⁶. There is a likelihood that Pier I would function on a landlord basis but decision on this issue has not yet been confirmed.

2.20.2 Workpackage 2: Charging practices of seaports

2.20.2.1 Financial flows from the port and vessel operators to the public sector

2.20.2.1.1 WP 2a: Charging practices related to port operators

Thus far, the only port operator in Piraeus is OLP (something that may change in the future if others are allowed). According to the concession contract signed in 2002, the rent to the Greek state for OLP's exclusive use and exploitation of the Piraeus port facilities is 1% of the company's adjusted gross turnover during the first three years of the agreement, that is, for years 2002, 2003 and 2004, and 2% thereafter. This means that for year 2003 OLP paid the sum of about 1.5 million euros as concession fee.

Naturally, in addition to the above fee, OLP pays to the Greek state corporate taxes and (when profitable) dividends to the state-shareholder. For year 2003, taxes paid amounted to 10.84 million euros (plus 0.81 million euros for previous years tax audits). Dividends paid amounted to 6.4 million euros, of which 74.14% (i.e., 4.74 million euros) went to state coffers. This means that for year 2003 the total direct financial flow from OLP to the Greek state amounted to about 18.1 million euros, or 12.7% of total

¹²⁶ In 2004 Piraeus dropped from the list of top 50 world container ports for the first time since 1998, to position No. 56, and traffic in 2004 and (as it seems) in 2005 is below the 2003 peak.

turnover, compared to which the 1% (or even the 2%) concession fee certainly looks meagre. Prior to corporatisation, none of these financial flows from OLP to the state existed, but OLP had other more serious burdens at that time (pension and medical expenses).

The grants legally paid by OLP to the 5 municipalities adjacent to it (a total of 689,600 euros for 2003) can be considered as a form of additional user fee paid to the public sector, perhaps as a compensation for the possible environmental burden and other external costs imposed by OLP on these communities. However, some of these municipalities claim that OLP owes them substantial 'municipal fees' (as any corporation located in them), something that OLP was exempt of prior to 1999. These municipalities contest the fact that OLP is still exempt from such fees. The accumulated amounts claimed by these municipalities run at 18.24 million euros as of 2003 (including penalties for non payment), and this matter is currently in the courts.

Complicating the matter is the fact that since 2003 the licensing of all major civil engineering works of OLP has to go through the Prefecture of Piraeus, the umbrella municipal agency above all these municipalities, which shares their position vis-à-vis these fees. A recent objection to OLP's various expansion plans on environmental grounds is an indication that the Prefecture's new licensing authority can be used as serious political leverage (press OLP to pay such fees or at least part thereof).

As said earlier, in addition to the direct payments from OLP to the public sector, one could consider as additional (indirect) financial flows all expenditures related to the construction and/or maintenance of fixed assets belonging to the state (even for the peripheral highway which is outside the port), and for which no provision for reimbursement to OLP exists. For maintenance alone, the 2.14 million euros paid by OLP in 2003 was higher than the 1.5 million euro concession fee for the same year. One may be led to believe that the Greek state, irrespective of all privileges still enjoyed by OLP (monopoly position being the most serious), is also using OLP as an instrument for financing projects or other expenditures that it is unwilling or unable to undertake itself. This is irrespective of these projects' return on investment for OLP (return that is very low for the passenger port and zero for the peripheral highway). Also, and as will be seen in the section that follows, the Greek state imposes an additional financial burden on OLP, by (a) not allowing it to charge to port users what it should in sectors where prices are kept artificially low, and (b) not providing compensation.

2.20.2.1.2 WP2b: Charging practices related to ship operators and cargo owners

As OLP offers a broad variety of services, its tariff structure is comprehensive and extensive. OLP itself has over 25 so-called 'regulations', each being a document governing a specific aspect of its operation, internal or external. Ten (10) of these regulations have tariffs embedded within them, collectively displaying the prices for all of the port's services. As the port is a monopoly in the Piraeus area, all of its

regulations and tariffs are mandatory by law to clients using the port's services. With the exception of confidential rates that are embedded into contracts between OLP and shipping lines (and this is an exception rather than a rule), all tariffs of the port are public and are published in the Greek government's official journal. The process of rate approval is first by the port's Board of Directors, and then by the Ministry of Economy and Finance. An exception concerns rate decreases, which do not need Ministerial approval.

The reader is referred to Psaraftis (2005) for a comprehensive account of the tariff reform at OLP during the period 1996 to 2001, after which (and until today) port prices have not changed¹²⁷. The tariff reform was extensive and targeted, and covered the following areas:

- Cargo handling of transhipped containers
- Cargo handling of local containers
- Storage of local containers
- Fees for delay and cancellation of a ship call
- Ship berthing
- Fees for vehicles & passengers;
- Ship repair zone
- Port exhibition centre
- Car terminal
- Rental of various spaces in the port area
- Grain silos (recently shut down)
- Dry docks, floating docks
- Water supply

For local (import or export) containers, cargo handling charges are split in two parts. The 'ship-dock' part (paid for by the shipping line) and the 'dock-gate' part (paid for by the cargo owner). Note that ship-dock charges are lower for export containers, as shown below (euros).

¹²⁷ An exception was in the 3 weeks of the Olympics in August 2004, when special rates were applied for services rendered to cruise ships parked at the passenger port as floating hotels. These rates increased passenger port revenues only marginally.

TYPE	SHIP-DOCK			DOCK-GATE	
	LADEN		EMPTY	LADEN	EMPTY
	IMPORT	EXPORT			
20-ft	76.30	58.69	52.82	23.48	16.14
40-ft	117.39	88.04	58.69	35.21	23.48

Source: OLP, as cited in Psaraftis (2005)

For transshipment of containers, the following ‘flat rate’ scale exists:

Moves/year	Price (euros)
1-5.000	60
5.001-10.000	54
10.001-20.000	51
>20.001	48

Source: OLP, as cited in Psaraftis (2005)

‘Flat’ means the rate is the same for 20 ft or 40 ft container, laden or empty. A ‘move’ is a loading or unloading operation (a transshipment operation involves two moves). Lines that have signed a transshipment contract with OLP may get a special rate. Tariff reform in the transshipment sector is associated with the emergence of Piraeus as a major transshipment hub in the Eastern Mediterranean in recent years.

Berthing fees for domestic ferries in the passenger port have been traditionally very low, even after a 200% increase that took place in 1998. The 214-m ‘Knossos Palace’, one of the largest ferries berthing in Piraeus (2,190 passengers and 700 cars) is charged only 158 euros per day for parking at the port¹²⁸. The apparent rationale for this situation seems to be the idea that due to societal cohesion reasons the port should subsidise maritime transport to and from the Aegean coastal archipelago. However, as OLP receives no compensation for keeping such fees to a low level, this

¹²⁸By comparison, the return ticket of a couple travelling from Piraeus to Irakleio with their car is 268 euros for tourist class and 436 euros for a first class cabin (low season).

policy results in very low revenues for the passenger port and the need to cross-subsidize it from more profitable port sectors, most notably the container terminal. This is at the expense of the container terminal's competitiveness.

A serious distortion also exists between the domestic ferry rates and the equivalent rates for ships going to destinations abroad, which are higher, even for two identical ships. This is a clear violation of EC Regulation 4055/1986, according to which no discrimination with respect to destination can exist. In year 2000, OLP tried to fix this discrepancy, by equalizing the domestic berthing rates to the level of the 'international' rates. However, this was rejected by the Ministry of Economy and Finance a few years later, probably on fears that higher rates would have an impact on inflation¹²⁹. OLP did not come back on this issue and in fact the port is still in violation of EU law in that regard. The same is true with all 12 top-tier Greek ports, and in fact the European Commission has taken Greece to the European Court on this issue. To date, domestic ferries pay to OLP the same berthing fees as in 1998, even though the Government has allowed ferry operators to raise their ticket prices several times since then. In fact, since November 2002 (the effective date of cabotage deregulation in Greece) most of the coastal shipping services have no price restrictions.

Years ahead may involve new challenges as regards pricing. The most serious will be whenever the domestic port market is liberalised. This may be the result of a new EU 'port package' or (as it seems) it may be the strategic decision by the Greek government. In a deregulated port regime, OLP would have to drastically reform its charging practices, otherwise much of the local traffic demand that is currently captive will escape, with unpredictable consequences. Nowhere is this more true than in the container terminal, OLP's financial 'locomotive'. In fact OLP has already witnessed a similar 'cargo drain' before, when most of its non-unitised general cargo fled to the nearby port of Elefsina in the late 80's and early 90's. The reason for this loss has been OLP's inability to offer competitive rates, and the main reason for this has been the intransigence of dockers to reform their work regulations. By the same token, a drastic reform of container tariffs to cope with domestic competition would necessitate similar reforms in dockers work regulations within the terminal. The same is true if Pier I is conceded to a private operator, as is likely to be the case. This would have to be complemented by non-trivial reforms in the tariffs charged by the rest of the container terminal if the latter is to remain competitive¹³⁰.

Domestic port market liberalisation, whenever it occurs, also needs to go hand in hand with OLP's ability to set tariffs in sectors that currently do not achieve an acceptable return on investment. By refusing to approve requested increases in low domestic ferry

¹²⁹ These fears are unfounded, as the impact of a berthing fee increase on inflation has been estimated to be negligible.

¹³⁰ Very much the same applies to Thessaloniki. OLTh is experiencing competition from nearby wharfs at Moudania and Stavros, where ships of questionable standards load and unload lo-lo and other cargoes by using private means (mobile cranes, etc). These cargoes are usually linked to Black Sea markets and want to avoid OLTh as the services provided are considered expensive and often plagued by delays (TRAPIST, 2002).

berthing rates, the Greek state is essentially providing a subsidy to private coastal shipping companies, many of which are listed in the Athens Stock Exchange. Interestingly enough, much of this subsidy (the economic value of which is unknown) is provided through OLP and OLTh, two public corporations that are also listed in the Athens Stock Exchange and, as such, have an obligation to their shareholders to maximize profits. The notion that any increase in the rates should not exceed inflation or other indices set by the Ministry of Economy and Finance is outdated and essentially means that the country's ports are not free to formulate an effective pricing policy.

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2.20.2.2 Annex: Tariff Reform in the Port of Piraeus: A Practical Approach¹³¹

ABSTRACT

This paper gives an overview of the main elements of the tariff reform that took place in the port of Piraeus during the last decade. The process of 'structural' revisions in many of the port's tariffs took place mainly between 1996 and 2001, which is the period during which, among other developments, container traffic through Piraeus more than doubled. Focusing on the above period and on container tariffs, the paper highlights the motivation for the changes and some of the practical difficulties associated with the process of port rate making in this major Mediterranean port. The tariff reform in some 8 other categories that took place in that period is also briefly outlined, and some success and failure stories are described.

INTRODUCTION

The port of Piraeus is part of the Athens greater metropolitan area (population about 5 million, about half of Greece). Each year about 12 million passengers go through the port, which is by far the largest in Greece (Thessaloniki is a distant second). The port is one of the most important in the Mediterranean, being located at the crossroads of three continents: Europe, Asia and Africa. In addition to passenger traffic, it also has a substantial volume of cargo traffic, in areas such as drybulk, general cargo, vehicles, and (most important) containers.

All business dealing with the port is administered by the Piraeus Port Authority (in Greek known as Organismos Limenos Pireos, or OLP). OLP was founded in 1930 and until 1999 was 'a public law undertaking', being ruled according to the general regulatory regime of many public entities in Greece, such as universities, hospitals, and other agencies and organizations. In 1999 OLP became a corporation, at that time wholly owned by the Greek State. In 2003 OLP was listed on the Athens Stock Exchange and since then the State's stake is of the order of 74.5%.

OLP is independent from the City of Piraeus and is managed by a CEO who reports to a Board of Directors, chaired by the President. OLP's revenues are on the order of 145 million euros a year and come from charges to port users for services rendered to them. Expenditures go to salaries of OLP personnel, construction and maintenance of port infrastructure, purchase of equipment, and other port operating expenses. OLP functions like a traditional 'service port', with all of its services provided by the port's personnel. These services do not include pilotage (provided by a separate service of the Ministry of Merchant Marine) and towing (provided by private companies), but they

¹³¹ This paper is to appear in "MARITIME ECONOMICS AND LOGISTICS" in 2005 or 2006. It is based on the author's experience as CEO of the Piraeus Port Authority (OLP) from August 1996 to March 2002

include cargo handling, berthing, storage, and rental of port's facilities to various private enterprises and public agencies. The port includes a comprehensive ship repair base, run by private yards and shops, and also manages 2 floating docks, 2 drydocks and a large Exhibition Center.

The port's container terminal 'Eleftherios Venizelos', located at the Neon Ikonion area, is responsible for roughly 65% of the annual port revenues. Historically, OLP has never received any funding from the Greek State, but is legally obliged to financially support the City of Piraeus and four other adjacent municipalities. After corporatization, OLP pays taxes to the State and dividends to its shareholders. As of 2002, it also pays a concession fee to the State for the exclusive use and exploitation of its facilities. Some of the port's infrastructure development has been financed in part from the European Union's Cohesion Fund and by a long-term loan from the European Investment Bank.

As the port of Piraeus offers a broad variety of services, its tariff structure is comprehensive and extensive. OLP itself has over 25 so-called 'regulations', each being a document governing a specific aspect of its operation, internal or external. Ten (10) of these regulations have tariffs embedded within them, collectively displaying the prices for all of the port's services. As the port is a monopoly in the Piraeus area, all of its regulations and tariffs are mandatory by law to clients using the port's services. With the exception of confidential rates that are embedded into contracts between OLP and shipping lines (and this is an exception rather than a rule), all tariffs of the port are public and are published in the Greek government's official journal. The rates go into minute detail for every conceivable service rendered by the port. The law stipulates that the process of rate approval is first by the port's Board of Directors, and then by the Ministry of National Economy. An exception concerns rate decreases, which do not need Ministerial approval.

The purpose of this paper is to provide an overview of the main elements of the tariff reform that took place in the port of Piraeus during the last decade. The paper is actually a 'positive' historical account of this reform, based on the experience of the author and his role in that reform, and an attempt to explain the rationale behind it. The paper does not attempt to provide a 'normative' account of what should have happened instead, although this is alluded to in a few cases. As will be seen, the approach that was used was practical, that is, void of sophisticated pricing or other models. This was by necessity rather than choice, as many of the necessary tools and data for such an approach were lacking. Still, the need for tariff reform was very pressing, and had to go on. The paper highlights the motivation for the tariff changes and some of the practical difficulties associated with it.

Whereas it is not the purpose of this paper to survey the literature on port pricing, the reader is referred to Arnold (1988), EC (1997), Haralambides et al (2001, 2002), Kumar (2002), and Meersman et al (2002) for a sample of work outlining the most important issues. From a practitioner's perspective, the usual challenge is to find ways to bridge the gap between what is established at the state-of-the-art level and what can be

accomplished in practice. As the reader will have an opportunity to see in the rest of the paper, for the port of Piraeus the gap was significant.

THE FIRST TARIFF REFORM PRIORITIES

With a major share of the port's revenues, it has been always clear that OLP's container terminal is critical for the profitability of the port. In that light, in mid-1996 the decision of container lines Evergreen and Lloyd Triestino to switch their transshipment hub to Gioia Tauro in southern Italy was certainly bad news. And indeed, after several years of growth, 1996 saw the volume of container traffic through Piraeus decline by approximately 4 percent vis-a-vis that of 1995 (575,000 versus 600,000 TEU). This reduction was mainly due to a 25% reduction of transshipment traffic through the port, as local traffic of imported and exported containers continued to grow as in previous years.

The market for container transshipment is one of the most dynamic ones in liner shipping. With the economies of scale realized by large (up to 10,000 TEU) container vessels deployed on trunk routes worldwide, it is not cost effective for these vessels to make direct calls in many ports. For this reason, lines develop 'hub and spoke' systems, in which smaller 'feeder' vessels distribute containers to and from smaller ports, whereas larger 'mother' vessels connect only to larger ports ('hub ports'). A comprehensive analysis of the decision process of container lines to select a hub port has been reported by Lirn et al (2004).

Which ports establish themselves as hub ports worldwide is always very fluid, and the Mediterranean is no exception. The main trunk route of the Mediterranean is the one connecting the Far East with Northern Europe, through the Suez Canal and Gibraltar. Some of the traffic on this route makes no Mediterranean port calls. However, some of the traffic comes from (or is destined to) markets on the Mediterranean (or close to Mediterranean ports) or markets in the Black Sea, and therefore has to pass through a Mediterranean port, either as local traffic or as transshipment traffic. Terminals such as those of Maersk/Sea Land (Algeciras), MCT (Gioia Tauro) and Marsaxlokk (Malta) have traditionally been hub ports in the Med.

In Piraeus, the question was whether the 1996 decline was a 'statistical glitch' or something more serious. Actually, transshipment had never accounted for more than 25 percent of the volume of container traffic through Piraeus, the bulk of the latter being local (mainly import) traffic. However, with the completion of a new 700-m length, 16.5-m depth quay and the delivery of four new Post-Panamax gantry cranes (all of which were targeted for completion by mid-1997), the box throughput capacity of Piraeus would about double. The question was, who would bring in enough traffic to fill in the new capacity? A related but central question was, what should be done with respect to port tariffs to attract such traffic?

After a uniform, across-the-board tariff increase of 6%, proposed in late 1996 and effective in March of 1997, it became clear that OLP could no longer proceed with this

method. Uniform rate increases were traditional every year and were computed as the necessary increases that would offset increases in the port's running costs from year to year. They were an easy, but certainly not an inspiring way to revise the myriads of rates in the port. In fact, a uniform increase was certainly not considered a reform, for it maintained the same proportions among all rates, and thus proliferated any distortions or anomalies that might exist before the increase.

The first striking reason for the necessity to reform the port's rates had nothing to do with containers, and in fact it came from the passenger port. As an example, a 500-foot domestic ferry paid the sum of 12.32 euros¹³² per day for parking at the Piraeus passenger port. This was a ridiculously low price by any standard (how much does parking a private car cost?). In fact, in 1995 the revenue generated from berthing fees of domestic ferries was just 0,7% of the port's annual revenues! Berthing fees for cruise vessels and 'port fees' that passengers and vehicles paid through their ferry tickets raised the contribution of the passenger port to the OLP's overall revenues to about 5,5%, but this was a very low figure too, especially considering that something like 35% of the port's investment funds had gone into the passenger port in recent years. The apparent rationale for this situation seemed to be the idea that due to societal cohesion reasons the port should subsidise maritime transport to and from the Greek coastal archipelago. However, this policy resulted in very low revenues for the passenger port. In fact, in the hypothetical case OLP land-reclaimed a section of its passenger port water area and built a large automobile parking garage, a facility in great demand for the city of Piraeus, the port's annual revenues would soar. But this was not an option.

In parallel with the passenger port, the strategic decision of OLP to enter aggressively into the Mediterranean transshipment market necessitated making the rates for container transshipment more competitive. The new capacity coming on line certainly provided a prime opportunity for such a strategic move. Clearly however, and with two lines having just left Piraeus to Gioia Tauro, the new transshipment traffic would not come by itself. For reasons that will become apparent below, it became clear that tariff reform was necessary, among several other things that were needed.

So the first tariff reform priority circa 1996-1997 was simple and twofold: (a) to produce a more competitive tariff structure for containers to be transhipped, and (b).to correct the ridiculously low berthing rates for domestic ferries.

The action as regards (b) will be described later in the paper. Regarding (a), and with about 4 million TEU annually transhipped within the Mediterranean at the time (a figure that would soar in later years), the pressing question was, can OLP at least grab some of the action? It was clear that Piraeus enjoyed several advantages over rivals such as Malta or Gioia Tauro, none of which had a serious local market potential, or was close

¹³² All prices in euros have been converted from Greek drachmas (GRD) using the central conversion rate of 340.75 GRD per euro (2002). In earlier years, the GRD to euro (or ECU) rate was higher.

to the expanding Black Sea market. For a shipping line interested in transshipment, having a local market was an incentive, so that costs could be spread over more traffic. Of course, with the fluid situation in the container scene and with the cutthroat competition among carriers globally, it was realized that it would take more than wishful thinking to lure box traffic to Piraeus. It was clear that having a good geographical location, some local potential and some spare capacity were not enough. Something had to be done on prices.

COMPLEXITIES OF THE CONTAINER TARIFF STRUCTURE

The first problem that was immediately brought forward was that cargo handling charges for containers were rather cumbersome. To compute the charges to unload a container from ship to dock or load it from dock to ship using the gantry cranes of the terminal, the following steps had to be carried out:

STEP 1: Begin with the container's 'basic rate';

STEP 2: Apply appropriate discount, if applicable;

STEP 3: Add the so-called 'employees overtime' surcharge, as specified by a separate rate;

STEP 4: To the subtotal of step 2, add the so-called 3% surcharge for 'work on holidays and week-ends'.

Basic rates in Step 1 were 65.24 euros for 20-ft boxes and 105.48 euros for 40-ft boxes. These rates were valid for standard, non-IMO-class containers. IMO-class containers (for inflammables, explosives, and other dangerous goods) had higher rates.

In Step 2, there was a wide variety of discounts. Import laden containers had no discounts. Empties, whether import or export, enjoyed a 30% discount versus the equivalent laden boxes, and export laden containers had a 35% discount versus the equivalent import laden ones. Containers to be transhipped had a special discount scale, as will be seen in the next section.

In Step 3, a separate set of rates was used for the so-called 'employees overtime' surcharge. This was a mechanism to collect money spent on overtime pay to port personnel. Overtime pay was a necessity due to fluctuations in workload and due to the fact that hiring part-time port personnel to cope with unforeseen workload was a rather cumbersome process. In that sense, 4.87 euros per box was charged for each 20-ft laden container, 2.17 euros for a 20-ft empty, 10.28 euros for a 40-ft laden, and 4.16 euros for a 40-ft empty. These charges were applied separately from cargo handling rates.

In Step 4, an additional 3% surcharge was slapped onto the previous subtotal, to collect money for additional labor expenses incurred for work on holidays and week-

ends. In prior years, OLP charged higher rates on holidays and week-ends, but after extensive consultation with port users, it changed that system to a 'flat rate', the same for all days. The 3% surcharge was thus a system to collect from all users money to be spent on work during days of higher pay. A law actually stipulated that these additional expenses could not exceed what was collected by the 3% surcharge. This stipulation created a problem, for the 3% was not enough, and some very creative accounting was devised to circumvent this problem¹³³.

The above algorithm was certainly complicated for the port's client. For one thing, the client received a rather complex bill instead of one price. The algorithm also led to some less-than-sensical charges, as can be seen from Table 2-167.

**Table 2-167: 'Ship-dock' cargo handling charges for local (import or export containers).
All prices are in euros.**

20-ft				40-ft		
laden		empty		laden		empty
import	export	(import-export)		import	export	(import-export)
Basic rate	65.24			105.38		
discount (%)	0	35%	30%	0	35%	30%
after discount	65.24	42.41	45.67	105.48	68.56	73.84
Employee overtime surcharge	4.87	4.87	2.17	10.28	10.28	4.16
subtotal	70.11	47.28	47.84	115.76	78.84	78.00
3% surcharge	2.10	1.42	1.44	3.47	2.37	2.34
TOTAL	72.21	48.69	49.27	119.23	81.21	80.34

The fact that the above algorithm led a 20-ft laden container for export being charged less than a 20-ft empty was certainly a paradox, at least to this author, and something that was difficult to justify. One would actually expect the opposite to be the case, and a correction of this anomaly was warranted. The anomaly was mainly due to the discount factors that were used (30% and 35%). These factors appeared arbitrary, and even though one could justify the rationale for each of them individually (charge less for empties and charge less for exports), if applied in combination they led to apparent distortions such as the above.

The adjustment to correct the above anomaly, together with the decision to abandon the above 4-step algorithm altogether and consolidate all charges of steps 1 through 4 above into one rate (per box category) sounded as the obvious thing to do. However, due to bureaucratic problems this was not implemented until the spring of 1999,

¹³³ This actually happened in the middle of serious labor unrest when government audit authorities insisted that the law had to be applied.

together with a broader restructuring of several other of the port's tariffs. In the meantime, the tariff reform that was very pressing regarded transshipment.

NON-COMPETITIVE TRANSHIPMENT RATES

Things in the transshipment department were more tricky. Circa 1997, laden containers to be transhipped from ship to ship had the scale of discounts shown in Table 2.

Table 2-168: Scale of discounts for laden containers

Moves/year	Discount
1-3,500	35%
3,501-5,000	45%
5,001-7,000	50%
7,001-30,000	60%
>30,000	65%

In Table 2-168, a 'move' was defined as one loading operation (from dock to ship) or as one unloading operation (from ship to dock). A complete transshipment ship-to-ship operation involved two moves. In the above table, the total transshipment moves of a shipping line within a year were to be computed separately for each box size, and then the appropriate discount was to be applied. These discounts were to be applied

'incrementally', so that if a company had (say) 6,000 moves of 20-ft containers during a year, it would get a 35% discount on the first 3,500 moves, a 45% discount on the next 1,500 moves (3,501 to 5,000) and a 50% discount on the remaining 1,000 moves. A similar procedure would apply for the 40-ft boxes, possibly resulting in a different discount.

Since the port had no way of predicting what transshipment traffic a line would achieve in a given year, let alone how that traffic would split among the various categories, the line settled its bills throughout the year by initially assuming a 'default' 35% discount for all categories of transshipment traffic, and after the end of the year it received a cash refund only for those categories for which traffic exceeded 3,500 moves. The cash refund was estimated *a posteriori*, by calculating what the line ought to have paid according to the discount scale and subtracting this amount from what the line had actually pre-paid, assuming the 'default' 35% discount. What was worse, no interest was included in this calculation (at that time, inflation was on the order of 9%).

Such a system was not only cumbersome to the client, but, as proven by the drop of transshipment traffic in 1996 versus 1995, not very competitive either. At the low end of the scale, the rate was clearly not competitive. The average transshipment rate for a 40-ft laden container was between 42 and 78 euros per move (84 to 154 per box), depending on the line's traffic. At the high end of the scale, and even if a line considered the rate competitive, it would have to pre-pay a considerable amount to the

port throughout the year, at a substantially higher rate, before being able to claim the low rate afterwards. In addition, the company would only receive a refund if its transshipment volume per box category was sufficiently high. By comparison, it was common knowledge that other competitive container terminals in the region offered 'flat' rates in the neighborhood of 40 euros per move (80 per box), or even below that level, offering such rates straight away and not after a year's activity.

TOWARDS A NEW TRANSHIPMENT SCALE

Coming up with a more competitive scale that was simultaneously profitable to the port was no easy task. At the medium term level, a study of the transshipment market in the Mediterranean was commissioned. Such a study was completed in late 1997 by the Athens University of Economics and Business and by MDS Transmodal in the UK, which were retained by OLP for that purpose. The study provided a useful overview of the market, along with possible opportunities and risks (Magirou et al, 1997).

However, things could not wait for the completion of the study, as several lines were engaged in talks with the port as early as end 1996. To negotiate properly with the lines, one would have to compute, among other things, the marginal cost of the container terminal. This was easier said than done. The absence of appropriate cost accounting tools was the main reason for that difficulty. The port's accounting system was structured in a 'horizontal' way, making cost and even revenue calculations very difficult. In addition, the terminal's computerization, a substantial project, was only at its infancy at the time (it was completed in 2001).

One could not wait for these developments. Tariffs had to be reformed and one had to find a plausible way of doing so. OLP thus engaged in such a task from first principles, by going over the following rudimentary sequence of steps:

- STEP 0: Go over steps 1 to 9 for two scenarios: (a) current traffic, including local traffic, (b) scenario with increased transshipment traffic;
- STEP 1: Assume a traffic scenario (expressed in TEUs, broken down by box type, and pattern of port calls in Piraeus for mother ships and feeders);
- STEP 2: Assume number of available gantry cranes;
- STEP 3: Assume an average gantry crane productivity (number of moves per hour, or per shift);
- STEP 4: Assume an average gantry crane down-time percentage;
- STEP 5: Compute number of crane moves needed to handle total traffic;
- STEP 6: Compute number of shifts needed for number of moves of Step 5;
- STEP 7: Compute labor costs;
- STEP 8: Compute other running costs;

STEP 9: Compute total costs;

STEP 10: Compute difference in total costs between the two scenarios;

STEP 11: Divide by number of additional transshipment moves, to get marginal cost per move.

The purpose of this crude model was to compute the marginal cost of transshipment and examine 'what if' scenarios that would be useful in OLP's negotiation with lines that would express an interest in using Piraeus as a hub. Each of these scenarios was described by a specific volume of transshipment traffic, a specific mix of 20/40 boxes, and a specific pattern of port calls in Piraeus for both mother and feeder vessels (Step 1).

In Step 2, the number of available gantry cranes was 5 or 6 in early 1997 (one of them was usually down), but would go to 9 or 10 in mid- 1997, with the arrival of the new cranes¹³⁴. In Step 3, the base crane productivity was 110 moves per shift, but might vary widely on a case by case basis. There were 3 shifts around the clock, each averaging about 7 ½ hours. In Step 7, labor costs depended on the composition of dockers gangs, and there was a parallel negotiation with the dockers unions to reduce them (negotiation that proved by and large unsuccessful).

It was clear that the pricing scheme (X euros per move) had a completely different structure from the cost scheme. The latter, at least as far as its labor component was concerned, was a function of the compensation structure of the port's personnel, which, especially for dockers, was rigid and cumbersome, being a function of time spent working on the ship and other parameters. This meant that the terminal's profitability depended critically on one parameter, the one assumed in Step 3, the average crane productivity. If that was high, cost was contained and the transshipment operation could be profitable. If it was low, the opposite was the case. High productivity was essential for container transshipment anyway, since lines demanded that in order to use Piraeus as a hub. But it was also important for the profitability of the operation, especially given that transshipment rates were squeezed downwards.

Many scenarios were run, and different pricing schemes were tested on them. What turned out impossible to estimate was the elasticity of demand, that is, how much transshipment traffic (if any) would come to Piraeus as a function of price. That was the reason transshipment traffic was assumed as an exogenous user input in Step 2. It was realized that the actual volume of transshipment traffic would reveal itself only in reality, assuming of course that such a traffic would appear in the first place.

At the end, and after considerable analysis, discussion and negotiation, a 'sliding' scale was established, as shown in Table 2-169. The rate was in US dollars, and was flat, the same for a 20-ft or 40-ft container, laden or empty.

¹³⁴ There were 14 such cranes in early 2005.

Table 2-169: New dollar scale for transshipment

Moves/year	Price (USD per move)
1-5,000	72.50
5,001-20.000	59.00
20,001-100,000	50.50
>100,000	43.50

Moves in the above table were total moves, for all categories of transhipped containers¹³⁵. For reasons that certainly cannot be defended on any scientific basis, the above scale was decided to be ‘sliding’ in the following sense: For a user who had A moves per year, the total charge was simply A times the rate corresponding to the range of traffic that bracketed A. For instance, for 3,000 moves the charge was 3,000*72.5, while for 7,000 moves the charge was 7,000*59. For 25,000 moves the charge was 25,000*50.5 and for 110,000 moves the charge was 110,000*43.5. This meant that the rate was uniform for all boxes, and only depended on which ‘traffic bracket’ the traffic fell into.

The way this scale would be applied was the following. In the beginning of the year the line would start with the highest rate (USD72,5 per move) and pay that rate until 5,000 moves were reached. If the moves were higher, the charge would be recalculated for the next lower rate (USD59 per move), until 20,000 moves were reached. And so on.

Given the above way of charging, it is clear that the above scale had certain anomalies, or ‘kinks’. For instance, if a line had between 5,001 and 6,144 moves, the line would pay less than if it had exactly 5,000 moves, by suddenly falling in the next lower rate bracket. Similar anomalies existed if traffic was between 20,001 and 23,366 moves and between 100,001 and 116,091 moves. Fortunately, no occurrences of such kinks were ever observed.

ADDITIONAL PROVISIONS FOR TRANSHIPMENT

The above sliding scale was put into effect in November 1997. In parallel, a new clause was introduced into the appropriate OLP ‘regulation’, that lines could team up as ‘alliances’ to handle each other’s transshipment traffic together and be charged as a single entity. At the same time, strict provisions were also introduced to set common rules for such alliances and also avoid ‘bogus alliances’, that is, lines that had no operating link whatsoever with one another, but wanted to benefit from the new scale by pooling their traffic and pretending they had formed a transshipment alliance.

These provisions were the following:

¹³⁵ This number of moves should not be confused with TEUs. An average value of 1.4 TEU per move was typical, but that could vary, depending on the mix between 20-ft and 40-ft boxes.

1. Any line or multi-line alliance would have to include at least one trunk line calling at the port with 'mother ships' at regular time intervals.
2. All mother and feeder ships of the line or alliance are declared to the port in advance.
3. All transshipment traffic of the alliance is pooled together and charged as a single entity.
4. Minimum number of transshipment moves 60,000 per year.
5. Minimum number of transshipment moves within any 3 consecutive months, 10,000.
6. Minimum number of transshipment moves within any 10 consecutive mother ship calls, 4,000.
7. Lower bounds in provisions No. 5 and 6 above to be pro-rated upwards if minimum number of annual transshipment moves is agreed to in advance to be more than 60,000 (by signature of a contract).

Of the above, the 'anti-bogus' provisions were essentially provisions No. 1 and 6, which essentially precluded the possibility that several lines might pool their disconnected feeder traffic and claim that they were working together as a transshipment alliance, just to get a lower rate. Provision No. 5 provided an early warning that the line or alliance might not meet its annual minimum obligations. Note that the lower bound of 10,000 moves in 3 months was on purpose more loose than 60,000 moves divided by 4 (=15,000 moves in 3 months), to account for possible seasonal fluctuations in traffic.

As mentioned earlier, the Ministry of National Economy had no business approving the new transshipment scale, as it essentially involved a rate decrease. That is why the new scale became effective immediately upon its approval by OLP's Board (Nov. 1997). OLP however submitted to the Ministry the new domestic ferry berthing rates, which were approved by the Board around the same time and definitely needed Ministerial approval. For these rates, an increase of up to 200% was decided, amid screams of protest from domestic ferry operators. Even though an even higher increase was warranted, the Ministry of National Economy was shocked with the 200% figure, worrying about the possible impact of this increase on inflation. But they agreed to them after it was explained that since even the new rates were very low, their effect on inflation was negligible.

The new ferry rates became effective in the spring of 1998, and have not changed ever since (actually their value in euros has decreased, as the conversion rate of the GRD to the euro increased from 1998 to 2002). OLP tried to reform them again in year 2000 but failed, as will be seen later.

PIRAEUS BECOMES A HUB PORT

Container lines Mediterranean Shipping Company (MSC) and Norasia signed a contract to tranship containers in the port of Piraeus in November 1997. This contract lasted until the summer of 1999, when a new contract was signed only with MSC, Norasia having left Piraeus in 1998. The latter contract was renegotiated several times in later years, and MSC became (and still is) the terminal's major client. In general, terms of transshipment contracts included the rates (which might not necessarily follow the transshipment scale), the minimum transshipment traffic obligation of the lines and performance standards for the terminal, to the extent applicable.

It is interesting to note that the 1997 scale was initially not applicable to the transshipment of containers for which the port of origin or destination was another port in Greece! For a move to count as a transshipment move, both origin and destination ports had to be foreign ports. The reason for this was that containers to be transhipped were initially identified as containers 'in transit' in the customs sense of the word (coming from a foreign country and going to a foreign country). Thus, a line wishing to use Piraeus to tranship boxes with an ultimate destination the port of Thessaloniki, could not benefit from that scale. This anomaly was eventually identified, but not fixed until some years later.

These developments certainly contributed to the eventual emergence of Piraeus as a major transshipment hub in the Eastern Mediterranean. With a significant increase of container traffic since late 1997, Piraeus made Containerisation International's list of 50 busiest container ports in the world in 1998 (with slot No. 41) and broke the 1 million TEU mark in 2000.

The 1997 transshipment scale lasted until year 2000, when it was replaced by another one, which was 'incremental' and had none of the 'kinks' of the previous scale. It was applicable also to boxes that had as origins or destinations other ports in Greece and was as in Table 4 that follows (flat rate, for 20-ft or 40-ft containers, laden or empty):

Table 2-170: New transshipment scale (as of 2000)

Moves/year	Price (euros per move)
1-5.000	60
5.001-10.000	54
10.001-20.000	51
>20.001	48

Again, there was nothing scientific about this new scale. But the rationale of it, established after talks with the port users, was to provide incentives for a line to increase its transshipment traffic, and, be competitive with other terminals. The word

‘incremental’ meant that if a line had 11,000 moves, the first 5,000 would be charged at 60 euros, the next 5,000 would be charged at 54 euros, and the remaining 1,000

moves at 51 euros. The new scale was considered more competitive than the old one, and it was stipulated that a line or alliance could enter into a contract with OLP if they could guarantee at least 40,000 transshipment moves per year.

The 2000 transshipment scale is still operational. In addition to MSC, China Shipping Container Line (CSCL) had a contract with OLP, during calendar years 2000 and 2001.

REFORM OF LOCAL CONTAINER RATES- CARGO HANDLING

The reform of local (import-export) container cargo handling rates presented a different set of difficulties than those for transshipment. For one thing, the rate scale circa 1998 looked as in Table 2-171 (overtime and 3% charges included- all prices in euros per move):

Table 2-171: Local container cargo handling original rate scale

LTYPE		SHIP-DOCK			DOCK-GATE		
		ADEN		EMPTY	LADEN	EMPTY	
		IMPORT	EXPORT			IMPORT	EXPORT
20-ft	72.21	48.69	49.27	22.40	15.82	14.70	
40-ft	119.23	81.21	80.34	38.56	27.54	29.94	

The ‘ship-dock’ part of this table concerned charges from the ship to the dock or vice versa, using the terminal’s gantry cranes. These charges were borne by the shipping line. The ‘dock-gate’ part concerned charges from the dock to the terminal’s gate or vice versa, and were borne by the owner of the cargo. No storage charges were included in this table (of which more in a section that follows).

Looking at this table, the following peculiarities can be observed:

- 1) In general, export container charges were lower than the equivalent import ones, with an overall discount of about 35% (the exception being empties for which there was no difference);
- 2) As stated earlier, the ship-dock charge for an export laden 20-ft container was lower than that for a 20-ft empty one.

Of course, a differentiation of rates with respect to the direction of traffic (import versus export) could not be justified on any cost or legal basis. Only two possible rationales could justify it, the one being noble and the other rather cunning. The ‘noble’ rationale was that the rate differentiation could be viewed (or perhaps was designed) as a way to support Greek exports. The ‘cunning’ rationale was that this was yet another

application of the ‘charge what the traffic can bear’ doctrine, a doctrine most prevalent in liner shipping and in other forms of monopoly or cartelized services.

Both the above two rationales had deficiencies. On the one hand, the ‘support-containerized-exports’ rationale was considered absurd, at least by this author, to be implemented by OLP, while other, more relevant public authorities (such as the

Ministry of Trade, the Ministry of National Economy, the Ministry of Industry, or the Ministry of Agriculture) had no such policy, at least for container exports. On the other hand, some port users claimed that the ‘charge-what-the-traffic-can-bear’ rationale did not seem in line with the fair application of the ‘user pays’ principle, at the time just been adopted in the context of the European Commission’s Green Paper (EC, 1997). According to these port users, if the Commission ever inquired, OLP would have a hard time arguing why it charged more to an inbound user than to an outbound one, all costs being exactly the same, and it might be accused of violating Community law and/or of abusing its dominant position.

Given the above, and as a basis for discussion, the following alternative rate table was proposed (see Table 6 below).

Table 2-172: Proposed new cargo handling rates (euros per move)

TYPE	SHIP-DOCK		DOCK-GATE	
	LADEN	EMPTY	LADEN	EMPTY
20-ft	79.23	64.56	26.41	20.54
40-ft	105.65		35.22	

In that table, import-export rates were equal, and flat rates were introduced for the empties (same for 20 ft and 40 ft). This meant that the 12 prior rates were replaced by only 6. In proposing the rates, calculations were made so as to ensure that revenues would not decrease (assuming constant demand and box size mix).

The proposal failed miserably, after a heated and time-consuming discussion with the port users, who up to 1999 had 3 seats on OLP’s 14-member Board¹³⁶. Some accused port management of discrimination in favor of carriers with a high 40-ft box mix, as the new table reduced rates for 40-ft imports and empties. However, what seemed to bother them the most was the equalization of import-export rates. ‘If you want to

¹³⁶ With OLP’s corporatization in 1999, OLP’s Board was reduced to 9 members, with zero port users represented on it, much to their consternation.

equalize them, go ahead, but do so by lowering all rates to the minimum', was the suggestion. That was rejected outright for it would lead to serious loss of revenue, and the analysis went back to square one.

At the end, the following compromise table was adopted, replacing the 12 rates with 10, and equalizing only the dock-gate import-export rates (see Table 2-173).

Table 2-173: Adopted new cargo handling rates (euros per move)

TYPE	SHIP-DOCK			DOCK-GATE	
	LADEN	EMPTY	LADEN	EMPTY	
IMPORT	EXPORT				
20-ft	76.30	58.69	52.82	23.48	16.14
40-ft	117.39	88.04	58.69	35.21	23.48

Although import and export rates were not equalized, the new table had a smaller gap between them (at most 25%, versus 35% before) and did not exhibit the anomaly of the previous scheme regarding the 20-ft export containers. At the time it was adopted, it was considered as the first step for the eventual equalization between export and import rates (something that has not happened thus far).

The new rates were implemented in the spring of 1999, even though the discussion on them started in 1998 and lasted close to nine months. These rates are still in place. To the best of our knowledge, there has not been any discussion to move from this table to a scheme in which rates are equal in both directions, much less to an all-round flat rate regime.

ABUSE OF DOMINANT POSITION?

An issue raised by several port users was the wide gap between local and transshipment rates. Their argument was tenable. OLP charged as low as USD 43.5 for a transshipment move¹³⁷, and as high as 117.39 euros for a local move. Both moves had exactly the same cost, but one was priced about three times as much as the other. So the users argued, 'Either OLP loses money on the transshipment move, or abuses its dominant position on the local move, or both. Which of these is true?'

There was an easy way to counter this argument, albeit evasive. OLP's pricing practice was perhaps the most direct manifestation of the 'charge-what-the-traffic-can-bear' principle, a principle pioneered and widely practised by container lines and conferences on a world-wide basis. But for an industry that charged its customers three times as

¹³⁷ Or in principle even less in confidential contracts that guaranteed a prescribed minimum number of transshipment moves per year.

much on the Far East to Europe route than it charged them on the opposite direction (and this was not the only example), it was hard to accuse OLP for doing something very similar with its terminal operations. So the lines got a taste of their own medicine in that regard, even though the reasons for such large price differences were not the same.

Another, perhaps more direct, counter argument was that OLP had provided significant funding for building a highway linking the commercial port with the passenger port. Many of the local cargoes would use that highway on their way to or from the terminal. One could then argue that the difference in price between transshipment cargoes and local cargoes reflected the principle that the latter should pay for the infrastructure costs of the highway.

Of course, it was not clear to what extent any of the above arguments would satisfy the European Commission, if it ever investigated whether OLP abused its dominant position with respect to pricing for local containers. Much of the money for the highway was provided by the EU Cohesion Fund anyway. Also, there was a wide-spread (yet generally not well documented) belief that the steep price difference was a mechanism for OLP to cross-subsidize other port operations that were not profitable. At the same time, OLP's management was very aware that rates that were deemed excessive would increase the lines' appetite to find or establish an alternative cheaper terminal near Piraeus, something that would have drastic repercussions for OLP. Thus far nothing of the sort has happened, but this is a possibility that cannot be excluded in the future, particularly if or when the Greek port market is liberalized.

HOW INELASTIC IS LOCAL TRAFFIC?

Another idea that was tried upon OLP by some major lines in their quest for cheaper local rates was the request to enjoy discounts for local traffic in exchange for more such traffic. The request was rejected, as its most likely effect would be the redistribution of a quasi-inelastic local traffic in favor of the lines that received such discounts and against those that did not. If there were a way for the lines to document that the additional traffic they would bring would be 'new traffic', additional to what the port as a whole was already getting, then their request could be discussed. They were unable to do so and the issue was tabled.

Even so, this last issue has merit in the sense that an appropriate pricing policy might generate new local traffic, for cargoes that would prefer to enter Greece onboard containers via Piraeus instead of coming (say) onboard a ro-ro vessel in the port of Patra or via Bulgaria onboard trucks. In that sense, the uncontested assumption that demand for local traffic in Piraeus is quasi-inelastic is not true, but the issue of exactly what is the elasticity is still open. Industry circles estimate the non-containerized cargo between Italy and Greece across the Adriatic on board ro-ro ferries as the equivalent of 1,400,000 TEU/yr, as compared to about 460,000 TEU/yr of local containerized cargo

through Piraeus. So the potential is there, although the way to lure some of this traffic to Piraeus is still elusive.

REFORM OF CONTAINER STORAGE RATES

Cargo handling rates were not the only object of container rate reform in Piraeus. Storage rate reform was very pressing too, as can be seen from the following table of storage rates (Table 2-174):

Table 2-174: Storage rates in force circa 2000 (euros per day)

Time in storage	LADEN					EMPTY	
	IMPORT		EXPORT				
	20-ft	40-ft	20-ft	40-ft	20-ft	40-ft	
1-30 days	4.05		5.63	2.11	2.87	0.21	0.40
31-60 days	15.15		21.04	6.76	9.20	0.73	1.43
61-90 days	23.75		33.02	10.59	14.41	1.14	2.25
above 90 days	27.09		37.65	12.08	16.43	1.29	2.57

Although the rationale of the table was clear (increasingly high rates as a function of time in storage), there were several problems with it. First, it was not very clear why a 40-ft container would not be charged per day exactly twice as its 20 ft equivalent, as the former held exactly the space of two 20-ft boxes. Second, in an era of ‘just-in-time’ systems, a table that even acknowledged that a box could reside more than three months in the terminal sounded outdated. Third, some charges were just ridiculously low, as epitomized by the 21 cents of the euro per day (or about 6 euros per month) charged for a 20-ft empty! What could one buy with 21 cents? Not even a chocolate bar!

Storage pricing policy is a prime tool for flow control in a terminal. Very low prices are tantamount to a ‘*stuff the terminal with boxes*’ policy, one that could create a lot of problems, increase congestion costs, and reduce profitability. It was decided that this should be put to an end, and OLP’s Board adopted a new rate table, replacing the original 24 rates with 12 (Table 2-175):

Table 2-175: New storage rates (euros per day)

Time in storage	LADEN		EMPTY	
	20-ft	40-ft	20-ft	40-ft
3- 10 days ¹³⁸	5.87		11.74	0.88 1.76
11- 30 days	8.80		17.60	2.35 4.70
above 30 days	17.60		35.20	5.87 11.74

No charges would be levied for the first two storage days (or five days for export laden containers). Again, no scientific analysis was used to formulate the new rates. But the rationale for them was threefold: (a) simplification, (b) rationalization, and (c) elimination of very low rates that would induce congestion. Indeed, one can observe that in this table, storage charges for 40-ft boxes are exactly twice those of 20-ft boxes. Empties are considerably more expensive to store than before, although still much cheaper than laden containers.

There were screams of protest from the port users when such a table was introduced (and its initial version was much harsher). Their argument was that with such prices, the terminal would be emptied immediately, as it would be cheaper for users to store

their containers in private yards outside it. The users also warned that this might drop the port's storage revenues. The port responded that its primary goal for introducing such a scheme was not to make money, but expedite the passage of containers through the terminal so that its throughput capacity would increase. The port was prepared to lose storage revenue to achieve this higher goal, but if, in the process of doing that, the port also made some money because some cargoes were left in the terminal, so much the better.

These rates remain in place ever since 2001. The port has earned considerable revenue from them, although in 2004 there have been protests from several users that they were forced by severe port congestion to store their containers more time than they wanted to, and therefore part of these charges were unfair and should not be paid. The legal dispute on this issue is still on going.

Interestingly enough, no restructuring whatsoever was introduced for storage rates of transhipped containers. The last recorded change was their uniform 6% increase in early 1997, together with all other port tariffs. These rates provide a period of free storage for 15 days, and gradual increases for longer times.

REFORM OF DELAYS AND CANCELLATION CHARGES

Another category of charges that seemed unnecessarily complex were the charges levied on a containership that would arrive with a delay from its pre-announced time, or

¹³⁸ 6-10 days for laden exports.

depart with a delay from its scheduled departure time. The port would then levy the following charges, depending upon the time of arrival of the ship (Table 2-176).

Table 2-176: Delays charges (euros per hour of delay)

Time period	Monday-Saturday (non-holiday)	Monday-Saturday (holiday)
07.30-22.10	337.78	591.10
22.10-06.00	624.95	878.28
06.00-07.30	506.67	759.99
Time period		Sunday
08.00-21.00		492.73
22.00-06.00		732.03
21.00-22.00 & 06.00-08.00		475.08

What was really the rationale for these 9 different charges? (which, by the way, involved 7 different time periods, one of which was actually only one hour!). The rationale had to do with the different rates paid to dockers in different time periods. As docker gangs would come to serve the ship and stay idle (but be paid nonetheless), the port really incurred a cost if the ship came late. Similarly if the ship would depart late, the port would incur a cost. But from the port user's perspective, the rate system looked Machiavellian, not to mention that it was difficult to apply.

In parallel, penalties existed for a cancellation of a ship call altogether and were as follows (Table 2-177).

Table 2-177: Cancellation charges (euros)

Monday-Saturday (non-holiday)	Monday-Saturday (holiday)	Sunday
2,296.51	3,309.73	2,758.12

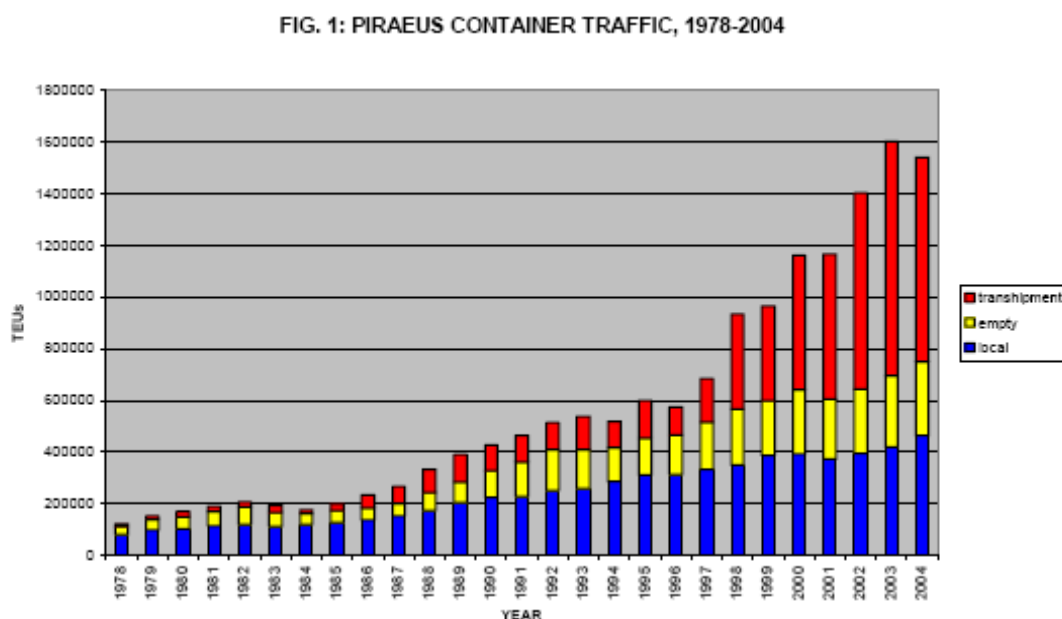
The rationale for this penalty was similar. 'You did not come, we mobilized the gang, you pay'. But three different rates made no sense to the user, who was used to a flat rate for cargo handling and storage.

This complex system was restructured in 1999 when a flat rate of 586.94 euros per hour of delay, and a flat rate of 2,934.70 euros per cancellation of call were introduced, thus replacing 12 different rates with just 2.

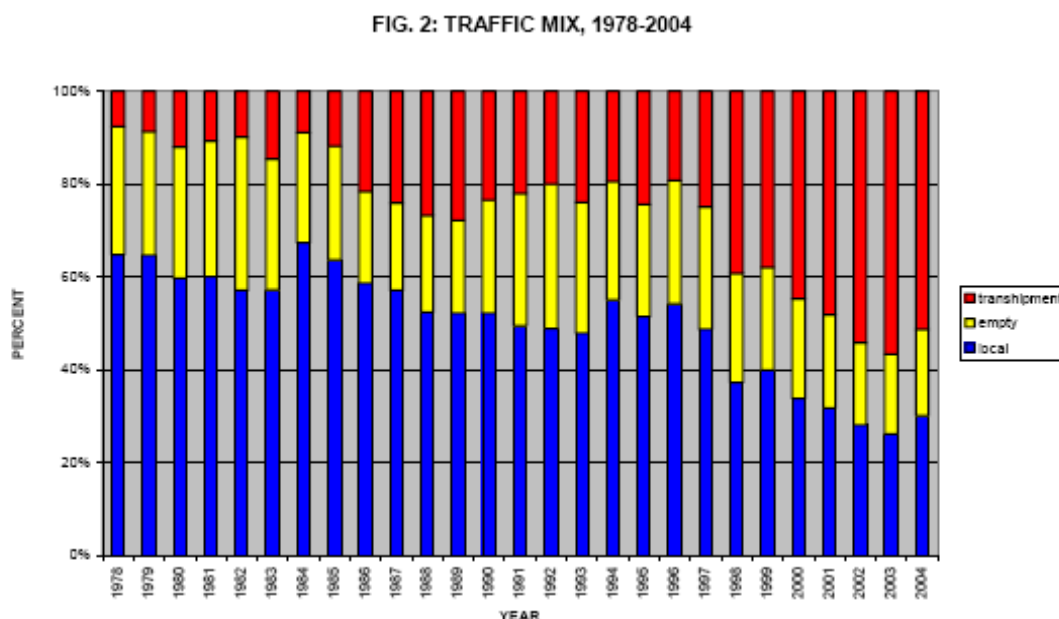
OVERALL PICTURE

There have been no changes in any of the container rates since 2001. Figure 2-13 shows the evolution of OLP's container traffic from 1978 to 2004, broken down by local traffic (laden import & export), empties and transshipment (laden). The strong growth of transshipment traffic can be seen, particularly after 1997, even though there was a reduction of it in 2004.

Fig. 2-13: Piraeus Container Traffic 1978-2004



Even more revealing is Figure 2-14, showing the dramatic shift in traffic mix through the terminal. Being less than 25% in years prior to 1998, transshipment traffic surged afterwards, and in fact after 2001 it went above 50% of the port's total TEU traffic. There are currently concerns that although Piraeus should remain a hub port in the East Med, too much of transshipment activity may be counter-productive and not necessarily profitable, particularly in case there is congestion and low productivity in the terminal. In fact, some users complained of congestion problems in years 2003 and 2004.

Fig. 2-14: Traffic Mix 1978-2004

It was reported that terminal revenues increased in 2004 vis-à-vis 2003, even though overall TEU traffic dropped. This can be explained by the fact that local traffic increased in 2004 versus 2003, and per box revenues of local traffic are higher than those of transshipment, whose traffic registered a decline. OLP remained financially healthy and profitable at least since corporatization, registering a before taxes profit margin of 24.5% on turnover in 2001, 23% in 2002, 21.4% in 2003 and 15.4% in 2004. OLP's IPO in 2003 was oversubscribed more than 16 times. However, the gradual reduction of profitability (especially in 2004, and, as it seems, in 2005) is a concern and measures to reverse it are contemplated.

OTHER TARIFF REFORMS

In the period to 2001, there were several additional tariff reforms in Piraeus. These were extensive but focused. They covered the following areas:

- Ships, vehicles & passengers;
- Ship repair zone;
- Port exhibition centre;
- Car terminal;
- Rental of various spaces in the port area;
- Grain silos;

- Dry docks, floating docks;
- Water supply.

It would be beyond the scope of this paper to cover all these reforms. But it is worth mentioning the following:

1. OLP operated (and still does) 4 ship repair docks, two floating docks and two drydocks. The daily rate for the use of each of these docks was a complex function of ship tonnage and dock residence time. This meant that two different ships (one small and one large) would pay a different price if they
2. Even after the 200% increase of domestic ferry rates of 1998, a serious distortion existed between these rates and the equivalent rates for ships going to destinations abroad, which were higher, even for two identical ships. This was a clear violation of EC Regulation 4055/1986, according to which no discrimination with respect to destination can exist. This represented a golden opportunity for OLP to fix the discrepancy, by equalizing the domestic berthing rates to the level of the 'international' rates.
3. To that effect, two comprehensive packages that completely restructured the framework of charges for ships, passengers and vehicles were approved by OLP's Board in year 2000. However, both packages were rejected by the Ministry of National Economy a few years later, on fears that higher rates would have an impact on inflation. OLP did not come back on this issue and in fact the port is still in violation of EC law in that regard. Some other ports in Greece that had the same problem fixed it in reverse, by lowering the international rates to the domestic level, raising of course questions as to how the loss of revenue would be recouped. To date, ferries pay to OLP the same berthing fees as in 1998, even though the Government has allowed ferry operators to raise their ticket prices several times since then. In fact, since 1 Nov. 2002 (the effective date of cabotage deregulation in Greece) many of the coastal shipping services have no price restrictions.
4. There were all sorts of other distortions that warranted attention. For instance, a TIR truck coming to Piraeus on a ro-ro ship would be charged much less than a 40-ft container being unloaded onto a truck from a ro-ro ship. As the two cargo units had approximately the same volume, the question was, why would the one category of cargo be charged so much less than the other? Was the shell of the package really the defining factor? Wasn't this unfair competition against containers unloaded by ro-ros? OLP fixed this discrepancy sometime in year 2000.

5. The restructuring of the tariffs of the ship repair zone took some time and was quite extensive. Rates concerned berthing fees for ships that docked specifically for repairs. They had a very complex structure, being a function of ship size, type and time. After considerable analysis and discussion, the 'Machiavellian perversion' structure of 86 or so different such rates that existed was reduced to just 12, and an incentive scheme for large-scale repair work was provided for. The new system became operational in 2001.

To date, there has been no further reform of tariffs at OLP, except for the 3 weeks of the Olympics in August 2004, when special rates were applied for services rendered to cruise ships parked at the passenger port as floating hotels. In the spring of 2005, OLP's management hinted that some rates would have to increase. In fact, it seems that a new tariff reform is being contemplated, however it is not clear whether this would be done by a uniform increase or by a targeted restructuring.

CONCLUSIONS

In the seminal 'Green paper on ports and maritime infrastructure' (EC, 1997), recommendations on possible port pricing policies were issued, and principles such as 'user pays' and transparency received prominent attention. Relevant EC Projects such as 'Atenco' have further provided more insights on what can be practically achieved and what not (Haralambides et al, 2001). In this author's opinion, there can be a wide gap between what can be expected scientifically, and what can be applied in practice. The latter is many times dictated by things as mundane as the design of accounting systems, the degree of computerization, and the availability of cost data. While this author believes that this statement is true in many cases, none epitomizes this better than the tariff reform exercise in the port of Piraeus. By necessity, this was a reform that was carried out in the absence of sophisticated accounting or other scientific tools, but with a view to make tariffs simpler, more competitive and more rational. The effort that was put forward was significant and targetted, and even though it probably produced only a small dent in the myriad of the port's tariffs, it also produced results that framed the economic development of the port in recent years, ensuring profitability and growth. Of course, tariff reform has been only one within the active set of tools used in the development of the port. However, in this author's opinion, it has been a significant tool.

Years ahead may involve new challenges. The most serious of these is if or when the domestic port market is liberalized. This may be the result of a new EU 'port package' or it may be the strategic decision by the Greek government. Whatever the reason, if something like this happens, OLP would have to drastically reform its rates, otherwise much of the local traffic demand that is currently captive will escape, with unpredictable consequences. Nowhere is this more true than in the container terminal, and in fact OLP has already witnessed a similar 'cargo drain' before, when most of its conventional cargo fled to the nearby port of Elefsina in the late 80's and early 90's. The reason for this loss has been OLP's inability to offer competitive rates, and the

main reason for this has been the intransigence of dockers to reform their work regulations for conventional cargo. By the same token, a drastic reform of container tariffs to cope with domestic competition would necessitate similar reforms in dockers work regulations within the terminal.

It is also obvious (to this author at least) that domestic port market liberalization, whenever it occurs, has to go hand in hand with OLP's ability to set tariffs in sectors that are currently in the red, or do not achieve an acceptable return on investment. A prime example of such a sector is the passenger port. By refusing to approve requested increases in low domestic ferry berthing rates, the Government is essentially providing a subsidy to private coastal shipping companies, many of which are listed in the Athens Stock Exchange. Ironically, this subsidy is provided via a public company also listed in the Athens Stock Exchange. Arguments that this is a 'social' policy to subsidize the travel of people to and from the islands of the Greek archipelago are really not valid, as it would be more efficient to provide such subsidy to these people directly, rather than through coastal shipping lines, or *a fortiori* through OLP. But if the Government wants to apply such subsidy through OLP, OLP is surely entitled to some compensation.

Whatever happens, and in view of the challenges in the years ahead, it is clear that more work will need to be carried out in the tariff area so that the port of Piraeus can continue to use tariff reform policy as one of its prime strategic instruments.

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